FEEDSTUFFS

The Weekly Newspaper for the Feed Industry

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Top of the (Outlook) Hopper

Crystal Ball Cloudy? Outlook Survey May Help

"My crystal ball is very cloudy," a northeastern feed manufacturer said frankly in commenting on the industry outlook for 1962. And, indeed, for many in the industry, the business outlook is not very clear, particularly in view of the possibility of more government controls, plus financing, end product prices and many other problems.

However, in an effort to remove some of the clouds from individual crystal balls, Feedstuffs has made its annual outlook survey. With the kind cooperation of more than 230 feed manufacturers who responded to the survey, a cross section of views on business prospects and a good many industry developments and problems is presented in this issue of Feedstuffs.

The survey findings will be found on this and following pages. The findings include views on such things as volume and profit expectations, types of feed, developments in integration and related activities, credit and financing, business methods and practices, government controls and major competitive factors.

Speaking of competitive factors, this year's survey shows that, among most feed men, the federal government's actual and prospective activities

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FEEDSTUFFS *Features This Week*

—SPECIAL OUTLOOK FEATURES—

METHODS, OBSTACLES — Methods of generating more business and obstacles to overcome in doing it are reviewed on **page 10.**

CREDIT AND FINANCING—Tightened financing appears to be in the works; may be some shift from conventional financing to integrated arrangements. **Page 6.**

CONCENTRATES—The concentrate trend continues, accelerating in some instances but perhaps slowing in others. **Page 12.**

CHANGING INDUSTRY—Industry examples of various developments and trends are outlined on **page 14.**

GOVERNMENT CONTROLS—An overwhelming majority of feed men oppose marketing orders or direct production controls. **Page 4.**

INTEGRATION—Outlook survey findings show widespread industry participation in various aspects of integrated operations. **Page 7.**

SERVICE—Services which feed manufacturers and dealers will emphasize in 1962 are reported on **page 8.**

COMMODITY OUTLOOK—Several feed industry authorities have prepared articles covering the feed business and end product outlook for various commodities. Subjects and authors include:

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PROTEIN FOR BROILERS—Protein requirements of broilers as influenced by fish products are discussed on **page 40.**

PORTABLE BIN SYSTEM—An Illinois firm uses a portable bin system to cut transportation costs, keep variety of concentrates. **Page 52.**

—REGULAR FEATURES—

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Putting Research to Work 58
Joe Brooks 60
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Most Feed Men Expect Higher Profits, Tonnage

By GEORGE L. GATES
Feedstuffs Editor

Considerable optimism about profit prospects is indicated by feed manufacturers who responded to Feedstuffs' annual look-ahead survey. Another tonnage increase is in the making for 1962, according to the survey results, although it appears that the increase will be smaller than that racked up in 1961.

Of the 226 manufacturers—large and small in all parts of the U.S.—who participated in the survey, 120 said they expected to improve their profits in 1962. Thirty said they expected a less profitable year, and 76 indicated no change in their expectations.

Some percentage comparisons with the results of a similar survey a year ago are possible. This year, 53% of all respondents expect a profit improvement. A year ago, 42% expected an increase. And while 21% expected a decline in profits during 1961, this year only 13% look for a drop. The percentage of those expecting no change remains about the same as a year ago.

Of the manufacturers who estimated their tonnage expectations, 154 look for an increase averaging about 12%. Twenty-seven expect smaller tonnage, also averaging about 12%, and 48 expect to produce about as much feed as they did in 1961.

The composite average of these estimates indicates a production increase for 1962 of about 7%.

(Turn to PROFITS, TONNAGE, page 82)

USDA Grain Sales, Price Ideas

$1.25 Corn by August Seen

By JOHN CIPPERLY
Feedstuffs Washington Correspondent

WASHINGTON — The touchstone for corn prices in 1962—based on the Bill Crochrane economic philosophy—is $1.25 corn by August as a national average at the farm level.

The U.S. Department of Agriculture is currently selling corn like mad to produce revenue from its certificate corn sales, in order to try to show Congress that it has paid for the feed grain program.

Current sales ideas for the balance of the winter are reputed to be at the rate of about 40 million bushels a week, tapering off thereafter, when the Cochrane economic theory will move prices onto higher ground, attaining the $1.25 per bushel level by August. After that time, he would again permit the September corn price to drop to $1.20.

That is the basis of the USDA economic philosophy. It also reflects the economic theories of Bill Cochrane, economic advisor on farm programs. However, as things now stand, the administration is temporizing between economic philosophy and budget problems.

This is a political year, and Secretary Freeman, who is unencumbered by sound farm economic ideas, appears to prefer adaptations of economic boss Bill Cochrane's ideas to meet problems in certain political areas where the vote in November, 1962, may be vital to the Democratic party.

The basic farm price outlook for 1962 is much as said in the opening paragraphs of this report. It is to

(Turn to $1.25 CORN, page 79)

FREEMAN PROPOSALS IN TROUBLE

—Bulletin—

WASHINGTON — Despite Agriculture Secretary Freeman's buoyant statements on his return from the winter White House at Palm Beach, it has been learned from competent USDA authorities that the Bureau of the Budget flatly rejected the Freeman proposal to up the price support level for corn in 1962 to $1.25 bu. All other price support levels for feed grains will remain the same as of this year.

No decision has been reached on soybeans, but the slap-down that Mr. Freeman got from the Bureau of the Budget would indicate that the soybean support level will probably be dropped to $2.20 bu.

This information clearly indicates that Mr. Freeman is not in the driver's seat and that any rumored vast new farm program has not met with the Kennedy administration's approval.

Finance Factors Indicate Cutback In Turkey Crop

By FRED E. TUNKS
Feedstuffs News Editor

Financial indicators — which seem to grow in importance to animal agriculture each year—point to a strong cutback in turkey production in 1962. But just how much this prospective cutback will be is far from definite. Whether or not there will be marketing orders in the turkey industry is one of the factors which make an estimate so nebulous.

It seems certain, however, that credit and financing decisions will be

(Turn to FINANCE FACTORS, page 83)

USDA Set to Go On Announcement Of Referendum

By JOHN CIPPERLY
Feedstuffs Washington Correspondent

WASHINGTON—The U.S. Department of Agriculture is all set to go on an announcement of a referendum on turkey hatching eggs and meat birds following the recent public hearings.

USDA officials are in a somewhat contradictory situation. They have been eager-beavering the marketing agreement and order technique under the drive of James T. Ralph, assistant secretary of agriculture, who has

(Turn to REFERENDUM, page 85)

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TOP OF THE HOPPER

(Continued from page 1)

attract as much or more attention than such things as financing, integration and business methods and services. Some (but not all) cursed "the government" about as much as their competitors, and that is something in this highly competitive industry.

But, regardless of this problem or that, many feed men are determined to adjust and move ahead, confident of their basic role in animal agriculture and food production. Some pessimism is evident, too, but most of the feed men replying to the survey look for some gain in profits in 1962. (For some, this is vital—an eastern integrator said, "Another year like 1961, and we probably will have to capitulate.") Also, it appears that feed tonnage will be up again in 1962; the survey returns average out to expectations of about a 7% gain in 1962 volume.

HOW WILL THIS BE ACHIEVED? As always, the answers vary greatly among different areas and different types of operations. For example, some will emphasize complete feeds; others, local mills as well as large, will push concentrate business. Some look for still more integration and "captive" business through contracting, joint ventures, direct ownership, etc.; others will continue to emphasize the basic job of feed production and distribution, with, in some cases, still more and better service for the feeder.

The conservative optimism among some was expressed this way by a regional midwestern manufacturer: "We take an optimistic look at the feed business of the future. However, we are aware of tremendous changes and the fast transition period that we are presently going through. It will be more difficult to adjust to competitive methods in the future."

Some feed men are considerably more optimistic than others. And, as one would expect in an industry which has so many different types of operations, the answer for one is not for another. Each area or each segment of the industry will have its ways of doing business in the fast changing industry and agriculture. A western feed man observed, "Regardless of what industry prospects might be, we know that there will be a profitable leader at the top of any industry—we intend to be that profitable leader in our segment of the industry."

Feedstuffs does not claim that this special survey represents a complete picture of the entire complex industry, but the editors do feel that the findings offer a pretty fair picture of current views and expectations. A very large share of the questionnaires was returned, and the replies are believed to represent most of the various types of feed business, plus a very substantial total tonnage.

THE FIRMS SURVEYED included both private business and cooperatives. They represented all regions, in general proportion to numbers of mills in the regions. They included everything from strictly local manufacturers (although a "local" firm in a concentrated production area, for example, might be bigger than a state or regional operation elsewhere) to the larger "national" or multi-regional organizations serving two or more regions of the country.

The resulting survey data and other important outlook articles—including some by industry leaders—represent an imposing amount of wordage for the busy feed man to digest. But it is suggested that feed men take a close look at the information; it should help supplement their own experience and knowledge and plans.

As the industry goes into 1962, it is obvious that some companies, in some areas, have continued to do well, while, for some, as a broiler man put it, "1961 has been a most crucial and chaotic year."

A western feed man summed up the over-all situation and prospects this way: "Certainly we are all agreed that reconstruction is under way as applied to our entire industry, and our problem is not to get mired down on the detour road until we get back on the super highway."

How's Business?

AN EVERY WEEK REVIEW OF FORMULA FEED BUSINESS VOLUME, INCLUDING PRICE, SUPPLY AND DEMAND TRENDS

Feed business in the final week of 1961 varied just as widely as it had most all year. Some areas reported business as being slowed by the holidays while in other areas business was booming. Responsible to a considerable degree for the good business was the weather.

Dairy feeds got a boost from the cold weather which put an end to most outside feeding of dairy cattle. Cattle feeds also continued to move well. Hog feeds were big volume items in swine raising areas. Improved broiler prices have encouraged broiler growers, and there has been some pickup in demand for those feeds.

Most feed men say that their new price lists will be somewhat higher. (Major market roundup and ingredient quotations appear on pages 80-82.)

Northwest

Feed manufacturing volume in the Northwest this week was somewhat higher than last week. Some manufacturers reported operations at about the same level as the pre-Christmas week; but, others said volume was considerably higher.

In cases where volume was higher, it was most generally attributed to the end of a booking period. Dairy feeds booked earlier under far lower millfeed prices were being taken at a rapid pace.

Dairy feeds, thus, were the most improved feed volumewise. Cattle and hog feeds continue to move well.

Prices are expected to be up 50¢ to $1.50 per ton.

Southwest

Formula feed business in the Southwest continues at a very brisk pace. In spite of the holiday this week, most mixers will be operating five days. Some trade sources indicate that tax-purpose buying is in a large part responsible for the present heavy volume of formula feed shipments. Other opinions were that the present volume should continue into January.

Cattle feed shipments provide the volume line and mills report a small backlog. Dairy and hog feeds are moving well.

Price list will show very few changes; however, there will be some small increases due to higher prices of some ingredients.

Northeast

Mixers closed out a good fall feeding season in western New York, with sales tonnage about 7% higher than a year earlier. Most of the rise took place in dairy feed demand. Even in the final week of the year demand was better than had been anticipated.

There was a smattering of turkey and broiler feeds showing up in the latest week, along with the usual good turnover in dairy feeds and egg mashes.

Heavy snows kept dairy feed demand at a high level in the New England states and turned the egg market strong as consumer shortages cropped up because of snow clogged roads.

Broiler prices also firmed up in the latter area to 15 to 17¢ lb. The 17¢ quote, where some operators can make a profit, was the first in the area in a long time.

Running time of formula feed manufacturers averaged 32 hours in the western New York area to 33 and on up to 40 hours in some New England mills.

Southeast

Cold weather has killed most of the pastures in the Southeast, even down into middle Florida, which has stimulated the buying of feed ingredients, and the formula feed business is reported as being good to very good.

Poultry feed manufacturers continue to operate at only about 70% of capacity. Due to the holidays, many of the poultry processing plants have curtailed their operations, which has resulted in not enough broilers coming on the market to supply demand. Prices paid for broilers, f.o.b. the farm, this week range from 15¢ to 16¢ lb., which is now affording good operators a nice return.

Central States

For the final week of the month and the year sales volume was what might be called "eminently satisfactory." It was in no sense rushing, but the widespread snowfall and low temperatures did put an end to any outdoor feeding. Lacking was the usual reluctance to rebuild inventories in the closing days of the calendar year.

In addition, hogs turned very strong, selling at a high of $19 at the local yards, the best level since September.

The recent upward readjustment in broiler prices has also tended to restore confidence.

Shipping directions flowed in a steady volume and most plants have been operating on a full 40-hour week.

South Central

Most formula feed plants in this area operated only four days this week, usually with overtime shifts. Although demand is reported to be only a trifle slower, due mostly to the holiday interruption, the slack is being taken up by fairly good sized back-logs. Some mills indicate that they prefer to let shipments run ahead of production this week in order to cut down their floor stocks before the year-end inventory.

No surprise showed up in the list of feeds in best demand. Hog feeds are undoubtedly the best moving line, with cattle feeds following. Colder weather moving down from the north has brought on increased calls for dairy feeds and interest in the general line of dealer items holds up well.

Ohio Valley

Interest in the formula feed market for this last week of the year was very quiet. The only demand noted was for cattle and dairy feeds, boosted somewhat by the inclement weather.

Demand for poultry and eggs in the retail markets was light, with prices remaining steady to lower.

Delmarva

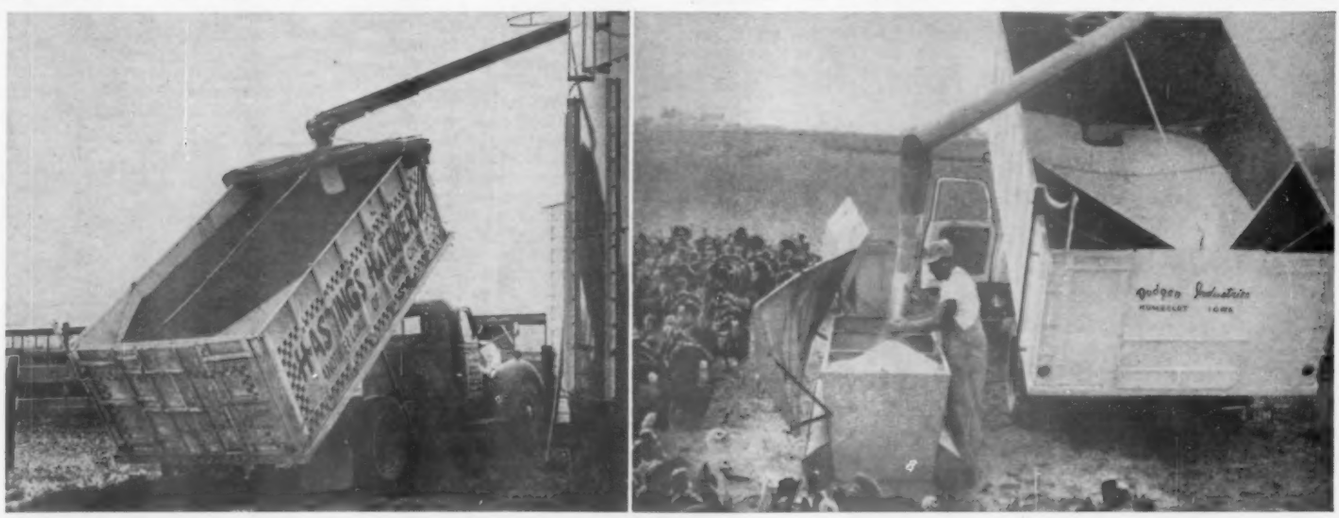
The meat-feed ratio for the broiler business was reduced slightly from the week before. Feed prices at $93.71 per ton and broiler prices at 16.92¢ made a pound of poultry meat buy

(Turn to MARKETS, page 85)

WHEN IT COMES TO BULK TRAILERS

OR BULK AND BAG VAN BODIES

OR BODIES FOR LOCAL DELIVERY



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Survey Shows Feed Men Are Overwhelmingly Opposed to Poultry Industry Controls

By RUSSELL TOKHEIM
Feedstuffs Staff

Government controls on turkeys, broilers and eggs wouldn't have a ghost of a chance if the matter were put up to a vote within the feed industry.

Persons answering Feedstuffs' annual outlook questionnaire opposed marketing orders by a ratio of over 8 to 1. Direct production controls would be turned down 13 to 1 by the survey group. Within the group favoring government controls were a number who favored either marketing orders or direct production controls, but not both, while some checked both in the survey question.

More persons favored marketing orders alone than favored direct production controls.

The question asked in the outlook survey was: "Are you in favor of government controls on turkeys, broilers, eggs?" Feed men were asked to answer yes or no for two parts of

this question—(1) marketing orders and (2) direct production controls.

Most feed men who are against government controls in turkeys, broilers and eggs cited them as a threat to the free enterprise system, and many indicated they thought such controls would be no more successful than a number of other government controls.

Among the minority favoring either one or both forms of controls, the seeming inability of producers to control production volume was frequently mentioned. One feed man commented that "we do not have the ability to control our greedy minds."

Answers to other questions in the survey indicated that most of those favoring marketing orders and/or direct production controls for poultry are involved in integrated or financing operations in the poultry field. However, many who finance or contract or produce birds or eggs directly are among the strongest opponents, judged by comments on the question. Many feed men not involved in integrated poultry operations also were outspoken opponents of any additional government controls of any kind. At the same time, at least some not involved in integrated operations expressed a feeling that controls are needed to halt over-production problems.

Based on survey returns where respondents identified themselves, it also appeared that there was at least some more tendency for cooperatives than private firms to favor marketing orders or direct controls, but here again there was no definite pattern.

Some persons have felt that if there are controls at all, they must be direct controls at the producer level. However, it may be noted that in this survey, sentiment in favor of controls tended to be more for marketing orders than direct production controls.

A number of feed manufacturers' questionnaires did not include a response on the control question, but indicated that this should be a producer decision.

Comments on the question—"Are you in favor of government controls on turkeys, broilers, eggs?"—follow, by regions and type of operation.

MULTI-REGIONAL—"One program leads to another because of overlapping effect, impossible of equitable administration. Government programs do not solve the basic problems."

"Not workable on national scale."

"Bureaucracy is a great evil. Massive integrations are evil. The first is destructive of freedoms. The second creates a new peasantry. Small losses of freedom are frightening and frustrating, but peasantry is degrading."

NORTHEAST—Local: "If the government would keep its nose out of business, we would all be much better off. In fact, it has a helluva time running its own business."

"We fear government regulation, and once we agree to a marketing order or production controls, where will they stop? We think never. Another year like 1961 and we probably will have to capitulate."

"It (orders and production controls) is the only way that the person who owns his own farm can exist. He cannot compete with the integrated operator."

"Did they ever work? The corn crop deal is an excellent example this year."

State: "Controls do not solve problems, particularly when one man may call all the shots. Let us accept the decision of Congress regarding agricultural programs."

"I am in favor of the above (controls) as long as the government continues to support grain."

"I do not like the drive to socialize agriculture. I can find no present gov-

(Turn to CONTROLS, page 81)

Are you in favor of government controls on turkeys, broilers, eggs?
MARKETING ORDERS

Type of Business	Northeast Yes	Northeast No	Southeast Yes	Southeast No	Midwest Yes	Midwest No	Southwest Yes	Southwest No	West Yes	West No
Local	2	14	2	13	1	30	0	4	0	28
State	1	8	2	9	0	18	1	8	1	4
Regional	1	10	3	3	5	20	0	10	1	3
Region Totals	4	32	7	25	6	68	1	22	2	35
Multi-Region	1	9								
Grand Total	21	191								

DIRECT PRODUCTION CONTROLS

Type of Business	Northeast Yes	Northeast No	Southeast Yes	Southeast No	Midwest Yes	Midwest No	Southwest Yes	Southwest No	West Yes	West No
Local	3	13	1	14	1	28	0	4	2	26
State	1	8	2	9	0	18	1	8	0	5
Regional	0	11	1	5	3	24	0	10	0	4
Region Totals	4	32	4	28	4	70	1	22	2	35
Multi-Region	0	10								
Grand Total	15	197								

Dr. William Jasper

D. J. Hardenbrook

Will Wilson

Med Maxwell

Broad, Special Interest Topics Selected For Midwest's Annual Meeting in Houston

KANSAS CITY—Broad and special interests of feed manufacturers have been considered in setting up the program for the 18th annual convention of the Midwest Feed Manufacturers Assn. at Houston, Texas, Jan. 28-30.

"The Challenge of Change" is the theme selected for the program portion of the event which will cover most of two days, Jan. 29 and 30, reports Lloyd Larson, executive vice president of the association. Talks and discussions will be heard in the Shamrock-Hilton Hotel.

Scheduled to speak on "Why Marketing Controls?" is Dr. James R. Ralph, assistant secretary of agriculture, who is best known to feed men for his part in organizing special commodity committees to study the possible need for marketing orders in the turkey, broiler and egg industries.

Texas' attorney general, Will Wilson, will discuss "Anti-trust and the Feed Industry." He is widely known for winning for Texas the right to keep its historic three-league tidelands boundary, his anti-trust efforts and his battles against crime in his state.

Feedlot Discussion

Feedlots of today and tomorrow will be covered by three panelists. The economics of feedlot operation will be discussed by Jim Rutter, editor of Feedlot magazine; management by Bass Powell, manager, United Industries Feedlot, Houston, and nutrition by Dr. W. M. Beeson, Purdue University.

Donald J. Hardenbrook, president, National Association of Manufactur-

(Turn to MIDWEST, page 84)

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Conference and Tour In Mexico Arranged

KANSAS CITY—In connection with its annual convention at Houston, the Midwest Feed Manufacturers Assn. has scheduled a feed conference and agricultural tour in Mexico and a ship channel cruise from Houston.

The Mexico City Feed Conference and agricultural tour will involve five days following the Houston convention—Jan. 31-Feb. 4. Reservations for these events should be made with Ralph Everett, president, Shores Travel Center, 9723 N.E. 2nd Ave., Miami 38, Fla., Midwest association officials advised this week.

The ship channel cruise, including visits to the battleship Texas and the San Jacinto monument, is planned for Jan. 28, preceding the formal program of the convention at the Shamrock-Hilton Hotel in Houston. In addition, on Jan. 29, there will be special events for ladies and a "South of the Border" party for all attending the convention.

The first day of the feed conference and agricultural tour in Mexico, Jan. 31, will begin at Mexico City. Participants will be met at the airport there by a delegate of the Mexican Department of Agriculture. A tour of Mexico City will complete the day.

Feb. 1 has been scheduled to include visits to feed mills, dairy and poultry farms. Visits to a number of points of interest in the Mexico City vicinity will follow on Feb. 2. No planned program is scheduled for Saturday, Feb. 3. Other tourist attractions will be visited Sunday, Feb. 4.

Midwest association officials note that anyone planning to go "south of the border" must have a Mexico tourist permit and a valid smallpox vaccination certificate. More information about these requirements and reservations for the Mexican conference and tour may be obtained from the Midwest Feed Manufacturers Assn., 20 W. 9th St. Building, Kansas City 5.

Oregon Feed Law Becomes Effective

SALEM, ORE.—A new commercial feed law is effective in Oregon Jan. 1.

Patterned after the model uniform feed law developed by the Association of American Feed Control Officials, the law conforms to regulations of the Food and Drug Administration, and is designed to bring labeling requirements in Oregon into uniformity with other states.

J. D. Patterson, chief chemist, Oregon Department of Agriculture, said a public meeting on the regulations is scheduled for early next year.

Some of the changes in the law are:

Official guarantees for maximum and minimum amounts of calcium and salt, and minimum amounts of phosphorus and iodine; the maximum fiber guarantee is no longer limited to 12%, and labeling terminology is based on the definitions of feed ingredients, standards and terms as defined by the AAFCO.

Increased use of laboratory facilities is anticipated by Mr. Patterson to meet the law's requirements. Modern commercial feeds are considerably more complex than was the case at the time the old law was written, the chief chemist explained. Work will include testing for quantities of vitamins, drugs and hormones which are added to feeds.

Ingredients Group Picks Parley Site

DES MOINES—The 1962 annual convention of the National Feed Ingredients Assn. will be held Sept. 12-14 at the LaSalle Hotel in Chicago, it was announced following a meeting of the association's board of directors here.

Paul W. Bonewitz, president of the National Feed Ingredients Assn., announced the appointment of 12 committees to assist in conducting the affairs of the association for 1962. He also said that the scientific advisory committee's recommendation for continuing the research grant at the University of Florida was accepted and that an expanded program proposal was presented.

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More Conservative Financing Indicated for '62; Integration to Replace Some Conventional Credit

OUTLOOK

By FRED E. TUNKS
Feedstuffs News Editor

Feedstuffs doesn't know whether Santa Claus got the message in time, but its annual outlook survey indicates that the old boy with the whiskers could have made a hit with most of the nation's feed manufacturers if he'd unrolled a long, certified list of big, sound producers with high net worth and credit ratings under each of their Christmas trees.

Sure, that's a big order, but it appears that when it comes to credit and financing in the feed industry, the most wanted item is assurance that the feeding operations they serve —or control or own, for that matter —will turn a profit.

This year's Feedstuffs' survey, as in preceding years, asked, "What changes or trends do you see developing or continuing in credit and financing?"

More Conservative

The over-riding conclusion gathered from survey answers is generally this: Feed men will be more conservative in their approach to the supply of and demand for credit and financing. A general tightening up of credit and financing is on the block. A major share of the responsibility for this caution, it seems, is what happened in turkeys and broilers in 1961.

Also, it is strongly indicated that instead of granting producers conventional credit and financing, some feed men will integrate through contracting, joint ventures or direct ownership and operation of producing facilities. And these integrated programs will be more closely supervised.

Some manufacturers may even bow out of the financing picture completely and turn their stake in the supplying of producer finance needs and operating capital over to banks and other lending institutions like a production credit association.

This may not be possible in some instances, however, as indicated by the local midwestern feed man who said: "I wish I could foresee stepped-up financing cooperation from our local banks. . . . This would certainly help our operation as a small independent feed manufacturer . . . . More and more larger feeder accounts will be financed through large feed mills."

Another survey respondent, a regional manufacturer in the Northeast, said: "We feel that the feed people are furnishing and being expected to furnish financing that rightfully should be handled by financial institutions. We would like to see banking people give agricultural financing more recognition and consideration."

Cash More Popular

The survey indicates that cash will be more popular in 1962 and customers—and dealers—who have it probably will get what they buy from some feed manufacturers cheaper than those who don't.

There are some feed men who insist on operating on a cash basis, or as close to it as possible. Some conservatives grant no credit at all, or allow payment within 30 days, while others will wait for payment if the feeder signs a contract or note and pays interest.

There are others in the feed business who believe the extension of credit and financing to customers belongs as part of a feed manufacturer's operation. Said a local manufacturer in the Southeast: "Let credit be limited to one source—the feed industry."

Feed men who believe it is part of a feed manufacturer's job to provide financial aid will be more cautious but will look harder for producers with big feed consumption potential backed by sound management. And it is indicated that feeders who get this aid will be asked to put more of their own money in their operations.

Integration's Role

And there is yet another general aspect to the future situation involving credit and financing. Integration, so respondents indicate, will perhaps play a more important role than ever—and this importance will not be confined to any single region. Integration, carried to the point of feed manufacturers being their own best customer through feeding poultry and livestock themselves, eliminates to some degree the need for seeking producers with a good credit rating. Integration, then, is to some the credit insurance they want.

"We look for a continuing trend of integration wherever it is workable," said a regional manufacturer in the West.

How integration cuts down on the need for financing producers is indicated in survey answers.

A midwesterner with a regional operation said he believes 1962 will see a stronger trend toward ownership rather than "large credit exposure."

A local manufacturer in the Southwest said: "We think there will be less financing and more company owned projects."

A midwestern manufacturer of regional size said he believes feed manufacturers will generally exercise closer supervision of their credit and financing as a result of whole or partial ownership of production facilities.

A number of respondents, including a manufacturer of multi-regional size, said more joint ventures are on the way.

A local manufacturer and integrator in the West said large terminal mills probably will grow birds only where they can control processing. These processors, he says, will become financially responsible for production.

A state-size manufacturer in the Midwest said credit and financing "have been used as a key to captive business—and still are . . ."

Volume Still High

Although responses to the survey question strongly indicate that credit and capital suppliers will be more cautious, this does not mean that demand for or even the supply of credit and financing will be less. However, this money probably will go to fewer and larger substantial producers.

In the over-all picture it looks as though there will be a substantial cutback in the amount of financing made available to turkey growers. Some of the attention given to turkeys by some feed manufacturers in 1961 may be diverted to other poultry and livestock.

A state-size trade representative in the Southwest suggested that the need for more adequate feeder financing should be recognized.

The growing importance of capital to the feed industry was pointed out by a regional manufacturer in the Midwest. He said the feed manufacturer or a local retail dealer "must have tremendous finances to keep up with this competitive situation. Financing or credit seems to be more important today than the products themselves."

Repayment Changes

There are indications that changes in how loaned money is paid back are on the way. For instance, a midwestern manufacturer of regional size says there is a need for year-around financing of feeders instead of "project clean-up" credit. This, he says, will mean more financing by banks and other institutions outside of the feed industry.

Of major significance is a trend pointed out by two manufacturers in the Midwest. It could mean that, for some manufacturers at least, their financing or credit contributions will be largely in the area of supplements.

Said one of the feed men: "With most large turkey and hog and egg laying operations beginning to mix their own feeds to reduce their costs, we will become basic concentrate manufacturers and will be financing only that portion."

The other said: "I believe that it will be necessary in our area to continue to finance the protein and supplements for many of our large feeders. They have the rough feed and grain but their cash resources are limited."

In many cases there are no clear-cut trends indicated by answers to the survey question on credit and financing. For example, while some feed men say more financing will be on a long-term basis, others say short-term credit will grow.

And it seems that no lines can be drawn between regions. Feed men in all regions seem to be affected by the same developments and will react in similar ways.

Survey responses indicate that losses encountered in the push that has resulted in over-production of broilers and turkeys have made the feed man more cautious. But these losses have not discouraged the industry. The trade knows that it must avoid the poor risk, but it also knows that there are good risks around, too, whether it be in poultry, cattle or hog production.

Collection of Answers

Here's a collection of typical answers feed men gave to the survey question which asked them for an opinion of what changes or trends they see developing or continuing in credit and financing:

MULTI-REGIONAL — "Trend toward absolute ownership of broilers, turkeys, layers to continue."

"Credit administered more judiciously."

"We believe creditors will be more selective. Proven ability will be more important. Probably more joint ventures."

"Probably tighter control and less offered."

NORTHEAST — Regional: "It would seem that more tightening of credit and less financing will be the order of the day."

"Continuation of usual credit and financing policies."

"We hope that individual farmers will be responsible themselves for credit rendered."

"Over-all tendency still upward."

State: "More credit from sources other than feed companies—PCA, FHA and banks."

"I believe that I see a change in the credit structure to more sound hands and a tightening of unsound policies."

"Losses causing backing down of financing. Much more progress vitally required in this field to regain a sound industry."

"More integration."

"We see bookings by some national companies and protection against price falls and rises."

"Big operations probably will be financed more and more by big manufacturers."

"Continued inflation will increase the need for financing. National mill pressure will make survival of the small mill increasingly difficult, chiefly because of financing difficulties."

Local: "No change expected."

"Entirely too much financing by larger companies, which smaller companies cannot do."

"(1) Cash discounts and (2) 30-day accounts unless covered by notes and mortgages."

". . . Large commercial mills are using credit and programs involving credit to hold and increase their volume."

SOUTHEAST—Regional: "Tight credit."

"For our organization: Firmer policy on all lines."

"Less 'no loss' guarantees in broiler and turkey contracts."

State: "More collateral behind credit."

"Dealer credit to producers will tighten up. Feed industry credit may tighten some, but loose credit still will be available from integrated companies to the extent of causing over-production in some fields."

"Turkey financing harder to come by. After mid-year a setback in egg contracts. More hog credit and programs."

"Greater integration in all fields through extension of credit with resulting tie-ins."

"Tighter credit policies; close supervision of fully integrated programs; larger units of contract growers; more careful planning and budgeting of programs."

Local: "Not much change. About same total amount of credit and financing, but extended to fewer people."

"Let credit be limited to one source —the feed industry."

Those companies that have had strict credit and finance policy will slacken. Those that have had slack policies will become more strict. There will be more direct to consumer financing."

"We expect to offer bulk discounts only to cash (30-day) customers. In that way we can offer the lowest prices."

"More demand for credit and financing."

(Turn to FINANCING, page 84)

A. E. Gourley Named to Head Specialty Sales

DES MOINES—The election of A. E. (Gene) Gourley as executive vice president and general manager of Specialty Sales Co., Des Moines, effective Jan. 1, 1962, has been announced by the firm's board of directors.

A. E. Gourley

The company will operate as a broker and jobber of vegetable and meat proteins and alfalfa products. It has been designated by Spencer Kellogg division of Textron, Inc., Buffalo, N.Y., as exclusive sales agent of industrial oils and special products for the central Iowa territory. Expansion into other agro-chemical and related products is anticipated.

The firm plans to service and offer products to the Midwest area, with a concentration in Iowa, Minnesota, Missouri, Nebraska, Colorado and Kansas.

Mr. Gourley, who has been associated with the oilseed processing industry 23 years, was formerly district sales manager of the Spencer Kellogg division of Textron, Inc., Des Moines. He has been located in Decatur, Ill.; Buffalo, N.Y., and Des Moines for Spencer Kellogg, merchandising soybean meal, linseed meal, industrial oils and special products.

Associated with the firm, in addition to Mr. Gourley, are F. H. Kelley, R. L. (Bob) Vohs and C. F. Barr.

Integration Continues as Major Force in Feed Industry; Widespread Participation Noted

By ROGER BERGLUND
Feedstuffs Managing Editor

A feed man on the East Coast commented, "Integration will produce most efficiently and will become more and more prevalent."

A feed man on the West Coast said, "While integration in some cases has worked, in others it has been a total failure."

A feed man headquartered in the central part of the country observed, "Integration may continue to increase, but it is not the total solution to the ills of agriculture or the feed business."

These outlook survey comments—from different points in the country—typify the variance of views among feed men on development in integration of production and marketing functions in animal agriculture.

Feed men's opinions vary to some extent among different regions, but even more among different types of feed operations. But most seem to agree that integration will continue to increase. At the same time, some feel that low price and loss situations of the past year will put a damper on some integrated operations. On the other hand, while control programs are supposed to help maintain the position of the independent producer, many feel that proposed marketing orders would stimulate integrated set-ups.

At any rate, survey results on specific questions on integrated operations reconfirm the fact that a good many feed companies are now involved directly in contract production and other aspects of integration, particularly in poultry. For example, 40% of the feed men responding to the survey said that they are or will be producing eggs and meat animals and birds on a contract basis. Similarly, many now have their own feeding enterprises or are part of processing and marketing operations. (See the accompanying table for commodity and regional details.)

Poultry operations, of course, are those most frequently integrated, but the development shows up to some extent in livestock also. And, some companies of all sizes and types, in all areas, have integrated operations of one type or another. While integration has gone furthest in broilers and turkeys, egg production and marketing are increasingly on an integrated basis, as shown in the survey findings.

In connection with the tabulation of replies, it may be noted that some of the answers on parts of the questionnaire were not entirely clear, and if there was not a definite "yes" on any question, the reply was recorded as "no" for tabulation purposes. So, if anything, the summaries of replies are conservative on the question of integrated activities of various types.

(General comments on integration and other industry developments will be presented in next week's Feedstuffs. Meanwhile, for other survey findings related to integration, also see other outlook reports in this issue.)

While integration in various ways and so-called "captive" business are increasing, some feed men may take the route of the southern manufacturer who said, "We have discontinued poultry and now concentrate on dairy, and our profit margins have increased."

CONTRACT PRODUCTION—Some 40% of the feed men indicated that they are or will be involved in contract production of poultry and livestock. This appears to be a fairly large percentage, in view of the fact that the survey covered all areas and all types of feed operations.

As one might expect, the Southeast leads in the proportion of firms engaged in contracting operations, but some pretty substantial numbers in other areas also are involved in contracting production, and half of the larger multi-regional firms contract for production.

Among commodities produced on a contract basis, broilers lead, but eggs and turkeys aren't far behind. The figures for livestock seem higher than might be expected, but apparently some firms interpreted this question as including certain financing as well as the conventional contract production (where the contractor owns the birds or animals and pays the grower a certain amount for his facilities and labor). However, most of the "yes" answers presumably refer to conventional contracting. At any rate, there is a good deal of it, and this includes eggs and turkeys and hogs as well as broilers. Incidentally, some of the "yes" answers on eggs presumably include hatching egg as well as table egg production.

Many of the firms indicated that they produce more than one commodity on a contract basis—such as broilers, eggs and hogs. But some are involved in only one type of contract operation—frequently eggs or turkeys as well as just broilers. The degree of involvement also varies greatly; some firms are largely or entirely on an integrated basis, while for others this is not a substantial part of the total business. It also may be noted that a good many firms have both contract operations and directly owned and operated feeding enterprises.

While it appears that contract production has continued to increase and many feel it will expand more, some are disenchanted with the whole business, particularly after low broiler and turkey prices and prospective low egg prices. On the question of contract production, a southwestern feed man said, "Yes, but we are getting out fast."

DIRECT OPERATION OF FEEDING ENTERPRISES (ownership or leasing of facilities and direct operation, as compared with contracting)—An increasingly important form of "captive" business is where the feed firm owns and operates one or more feeding enterprises. In some poultry areas there is a trend toward more of this as compared with contracting, but even in the Midwest, where conventional integration is not generally so important, quite a number of feed men have, to some extent, their own poultry operations or hog or cattle feedlots. Even a fair number of dairy operations are included, as shown in the footnote of the table with figures on this type of operation. It is of some interest to observe that some of the larger companies are among those with their own feeding operations.

Presumably some of the herds or flocks are at least partially for demonstration purposes, but it appears that some good sized direct feeding operations are included, too, and this includes some large cattle feedlots as well as pretty big broiler and turkey projects.

A number of feed men have commented that they can maintain better control and come up with lower costs in their own feeding enterprises. Others, however, because of capital requirements or for other reasons, apparently are sticking mostly or entirely with contracting.

As shown in the table, more than a third of the feed men replying to the survey indicated they have their own directly operated feeding enterprises. Among areas, the percentages are highest in southern regions, but the figures are fairly substantial in other sections, too.

Are you involved in, or do you expect in 1962 to become involved in, any of the following?

Contract Production*

Type of Business	Northeast Yes	Northeast No	Southeast Yes	Southeast No	Midwest Yes	Midwest No	Southwest Yes	Southwest No	West Yes	West No
Local	3	12	11	7	9	24	3	1	9	23
State	4	5	8	5	10	11	2	7	3	3
Regional	2	10	4	1	12	15	6	6	2	2
Regional Totals	9	27	23	13	31	50	11	14	14	28
Multi-Regional	5	6								
Grand Total	93	137								

*Numbers of feed manufacturers involved in contract production of the various types of products were as follows: Broilers, 55; eggs, 43; turkeys, 39; hogs, 24; beef, 10.

Direct Operation of Feeding Enterprises*
(Not Contracting)

Type of Business	Northeast Yes	Northeast No	Southeast Yes	Southeast No	Midwest Yes	Midwest No	Southwest Yes	Southwest No	West Yes	West No
Local	4	11	10	8	12	21	2	2	13	19
State	5	4	6	7	8	13	5	4	1	5
Regional	2	10	0	5	6	21	4	8	1	3
Regional Totals	11	25	16	20	26	55	11	14	15	27
Multi-Regional	6	4								
Grand Total	85	145								

*Numbers of feed manufacturers involved in direct operation of the various types of feeding enterprises were as follows: Broilers, 36; layers, 39; turkeys, 26; hogs, 26; cattle, 27; lambs, 2; dairy, 12.

Hatchery Operations

Type of Business	Northeast Yes	Northeast No	Southeast Yes	Southeast No	Midwest Yes	Midwest No	Southwest Yes	Southwest No	West Yes	West No
Local	1	14	6	12	6	27	3	1	2	30
State	4	5	2	11	4	17	0	9	0	6
Regional	1	11	4	1	3	24	3	9	0	4
Regional Totals	6	30	12	24	13	68	6	19	2	40
Multi-Regional	3	7								
Grand Total	42	188								

Processing*
(Directly or Indirectly)

Type of Business	Northeast Yes	Northeast No	Southeast Yes	Southeast No	Midwest Yes	Midwest No	Southwest Yes	Southwest No	West Yes	West No
Local	0	15	4	14	4	29	0	4	4	28
State	1	8	3	10	4	17	2	7	2	4
Regional	1	11	2	3	3	24	3	9	1	3
Regional Totals	2	34	9	27	11	70	5	20	7	35
Multi-Regional	3	7								
Grand Total	37	193								

*Numbers of feed manufacturers involved in processing the various types of end products were as follows: Broilers, 18; eggs, 23; turkeys, 15; livestock, 1.

End Product Marketing*
(Directly or Indirectly)

Type of Business	Northeast Yes	Northeast No	Southeast Yes	Southeast No	Midwest Yes	Midwest No	Southwest Yes	Southwest No	West Yes	West No
Local	1	14	6	12	8	25	0	4	8	24
State	4	5	2	11	6	15	2	7	4	2
Regional	3	9	2	3	9	18	7	5	2	2
Regional Totals	8	28	10	26	23	58	9	16	14	28
Multi-Regional	4	6								
Grand Total	68	162								

*Numbers of feed manufacturers involved in marketing the various types of end products were as follows: Broilers, 26; eggs, 47; turkeys, 23; pork, 8; beef, 4; dairy, 5.

A good many feed men feed cattle, turkeys or layers of their own even though they are not integrated in other ways, but many are in both contract and direct feeding operations.

HATCHERY OPERATIONS—About a fifth of the firms responding to the survey questionnaire put down a "yes" answer when asked whether they were involved in hatchery operations. Most of these presumably are integrated operators in some of the major poultry areas, including some who are integrated all the way from breeder flock to processing. However, some largely non-integrated companies are also involved, such as a combination hatchery and feed milling firm in the Midwest.

PROCESSING—The number of firms which are involved in processing was not large in this particular survey, but the fact that 37 companies are involved directly or indirectly in processing is another indication of how the feed industry has become more directly a part of the total business of producing and marketing the end products of animal agriculture.

Most of the respondents did not specify whether their interest in processing was direct or indirect in some way, but presumably a fair number have their own processing operations. This includes some of the rather fully or completely integrated private companies. Also, the survey took in cooperatives which are involved in poultry and egg processing and marketing as well as the feed business. Some of the affirmative answers apparently included arrangements where there are ties between integrated producers and processing firms.

For some of the firms, the proc-

(Turn to INTEGRATION, page 84)

Management Aid, Bulk Delivery, Custom Work, Marketing Help To Be Stressed by Feed Men

By BILL DORN
Feedstuffs Staff

Which key or keys will feed manufacturers and their dealers choose, in the way of service, to take them through the door to greater profits in 1962?

Judging from Feedstuffs outlook questionnaire replies, many will be stressing the same service techniques, with some variation depending upon the area of the country and the size of the operation.

The question asked was: "What types of service do you (or your dealers) expect to stress in 1962?"

On the basis of over-all answers received to this question from 220 manufacturers, these conclusions can be made:

- There will be a heavy emphasis on livestock and poultry management advice and programs from companies of all sizes, especially the larger regional firms. A total of 167 checked this service.
- An emphasis on bulk delivery is widespread, being either the item most checked or tied for the top in all regions. There were 179 who checked this.
- An apparent lack of enchantment exists on the part of many regarding credit and financing. Fifty-one feed companies marked this as services their firm will stress in 1962. This is less than said in last year's survey that they would stress credit and finance in 1961, and the current survey has a larger return.
- And, custom mixing (82 replies), special mixes (91), and product marketing assistance (80) are also popular, being singled out for service stress.

In other responses, grain banking had 54 and mobile milling 20.

Regional firms in most areas leaned heavily toward offering product marketing assistance, livestock and poultry management advice and programs and bulk delivery.

The state manufacturers also leaned toward these three points, and also mentioned special mixes and custom milling as services.

The local mill responses indicated favor with several of the services, with stress on livestock and poultry management advice and programs, bulk delivery, product marketing assistance, special mixes and custom milling, along with a fairly heavy use of grain banking.

Grain banking and custom milling, as expected, were mentioned most often by firms in grain areas.

Many firms with complete or extensive integration did not check any of the services, while other integrators checked special mixes, bulk delivery and livestock and poultry management advice and programs most often.

The feeling of many manufacturers about credit might be summed up by the regional midwest firm and the western state-size firm which both placed behind their check of the credit and financing category of service the word "sound."

Many are apparently putting less emphasis on credit and financing. Another western feed man crossed out the financing part of the question and added in the comment space that his firm aims in 1962 "to show that credit is a privilege and not something that can be kicked around."

A northeast regional company states: "Our dealer organization is being strongly urged to press for less credit extension and granting of more cash discounts. P.S. It works."

Other services listed and comments were:

A multi-regional company: "More business management training for dealers. Counselling in planning supply in terms of demand. Helping dealers gain confidence in talking to and servicing big feeders."

A western local firm said its largest increase in activities "will be on operations of our own."

Another western feed man said his emphasis will go to a "feedlot operation."

A western state-size firm plans "horizontal integration with other related companies."

A regional southeastern organization says it will stress a special dairy feeding program featuring scientific grain feeding advice based on roughage, status of animal and other factors.

A midwest company indicated it plans to shorten the distance between feed mill and feed user, "probably by addition of a fourth mill in 1962."

Other services indicated by one or more companies were:

Quality control, consulting services, regular formulas adapted medicinally to individual requirements, service to dealers, complete programs, animal health service, poultry contracts, improved dealer training and service personnel training, sound and economical nutrition, and pelleting.

Then there are those who are going all out, like the Northeast regional company which checked all categories of service for emphasis in 1962.

E. G. Schmidt

Frank Tuppeny

Two Promotions in Pfizer Ag Division

NEW YORK—Two executive promotions within the agricultural division of Chas. Pfizer & Co., Inc., New York, have been announced by J. J. Thompson, vice president of the firm and general manager of the division.

Emil G. Schmidt, Midwest regional manager, Chicago, since 1952, has been named national field sales manager of the agricultural division with headquarters in New York.

Frank Tuppeny, sales operations manager, New York, since 1960, has been promoted to Midwest regional manager, agricultural division, and will relocate in Chicago.

Mr. Schmidt joined Pfizer as an agricultural sales representative in January, 1952, and was promoted to Midwest regional manager of the division that same year. Previous to joining Pfizer, he served as production vice president of the L. G. Doup Co., Omaha, and also as plant manager of the Morgan Manufacturing Co., Chicago. Mr. Schmidt is a graduate of Purdue University, Lafayette, Ind., with a B.S. in chemical engineering.

Mr. Tuppeny joined Pfizer in 1957 as a sales representative in feed supplements assigned to the eastern region. Prior to joining the firm, he was employed with American Stores Co. for eight years. Promoted in 1959 to assistant product manager of feed supplements, he was advanced to sales operations manager in 1960.

Mr. Tuppeny is a graduate of Pennsylvania State University, University Park, with a B.S. degree in agricultural economics. He also holds a master's degree in business administration from Michigan State.

OUTLOOK

What types of service do you (or your dealers) expect to stress in 1962?

Southwest

Service	Regional	State	Local
Grain Bank	1	2	..
Custom Milling	2	2	..
Mobile Milling	1	..	..
Credit and Financing	1	2	1
Special Mixes	2	6	2
Bulk Delivery	9	8	2
Product Marketing Assistance	7	3	1
Livestock and Poultry Management Advice, Programs	9	6	2
Total Firms Responding	12	9	3

Southeast

Service	Regional	State	Local
Grain Bank	..	1	3
Custom Milling	1	1	8
Mobile Milling	..	1	1
Credit and Financing	2	2	2
Special Mixes	1	6	8
Bulk Delivery	4	10	11
Product Marketing Assistance	2	4	4
Livestock and Poultry Management Advice, Programs	6	8	11
Total Firms Responding	6	9	13

Northeast

Service	Regional	State	Local
Grain Bank	2	3	4
Custom Milling	2	1	3
Mobile Milling	1	..	1
Credit and Financing	4	2	2
Special Mixes	5	4	5
Bulk Delivery	10	8	12
Product Marketing Assistance	9	3	3
Livestock and Poultry Management Advice, Programs	11	7	9
Total Firms Responding	11	9	13

West

Service	Regional	State	Local
Grain Bank	..	1	4
Custom Milling	..	3	13
Mobile Milling	..	..	..
Credit and Financing	..	2	3
Special Mixes	1	3	19
Bulk Delivery	3	4	22
Product Marketing Assistance	2	3	7
Livestock and Poultry Management Advice, Programs	4	5	18
Total Firms Responding	4	6	33

Midwest

Service	Regional	State	Local
Grain Bank	6	6	17
Custom Milling	14	9	19
Mobile Milling	7	4	3
Credit and Financing	10	6	9
Special Mixes	8	9	12
Bulk Delivery	19	20	28
Product Marketing Assistance	11	8	7
Livestock and Poultry Management Advice, Programs	22	13	27
Total Firms Responding	27	21	34

Multi-Regional Firms

Service	Total
Grain Bank	4
Custom Milling	4
Mobile Milling	1
Credit and Financing	3
Special Mixes	..
Bulk Delivery	9
Product Marketing Assistance	6
Livestock and Poultry Management Advice, Programs	9
Total Firms Responding	10

Over-all Totals

Service	Total
Grain Bank	54
Custom Milling	82
Mobile Milling	20
Credit and Financing	51
Special Mixes	91
Bulk Delivery	179
Product Marketing Assistance	80
Livestock and Poultry Management Advice, Programs	167
Total Firms Answering "Service" Questions in Questionnaire	220

Committee to Study Frozen Broiler Futures Contract

By F. C. BISSON
Feedstuffs Special Correspondent

CHICAGO—The board of governors of the Chicago Mercantile Exchange, at a special meeting held Dec. 28, appointed a four-man committee to further explore the feasibility of the exchange's establishing a frozen broiler futures contract.

Committee members are Glen Andersen, Joseph Sieger, H. I. Henner and Frank Sherman. They have been authorized by the board to attend the three-day poultry Fact Finding Conference to be held in Kansas City Feb. 10-12. There they will visit broiler producing and processing plants in the area and secure useful first hand information that is intended to be helpful in drawing up specifications for the futures contract that is expected to be inaugurated.

Appointment of this committee followed a visit to the Mercantile Exchange by officials of the National Broiler Council some 10 days ago. The council was represented by Joe Frank Sanderson, Sanderson Farms, Inc., council president, and Merle Thomas, director of merchandising.

They were much impressed with the operations of the exchange and shared jointly the enthusiasm expressed by its president, Everette B. Harris and other of its officials, as well as individual members contacted on its trading floor, over the potential of a fresh frozen broiler futures contract.

Price Stability

In connection with the proposed expansion in the large number of agricultural commodities already being traded in on the mercantile exchange, Mr. Harris said that broiler prices would be greatly stabilized once futures trading in that commodity became firmly established. "Futures trading," he said, "smooths out the peaks and the valleys in the price structure and provides for a normal merchandising profit at all times."

On the subject of the awareness of the Mercantile Exchange of the potential possibilities inherent in a fresh frozen broiler futures contract, Mr. Harris called attention to the recent sharp step-up in activity in their turkey futures. After having been somewhat on the dormant side for some weeks, futures trade in that commodity hit a 10-year high Dec. 18 with 44 contracts changing hands, accounting for a total poundage of 1,250,000. He likewise pointed out that the exchange's new commodities committee is currently perfecting a contract calling for futures trading in frozen skinned hams.

Some member firms have sounded out potential users of such contracts through the medium of questionnaires, asking whether they favored their establishment, the size of the contract that might be preferred, delivery months, etc.

Ground Breaking Held

VICKSBURG, MISS.—Ground breaking ceremonies have been held for the Wholesale Cash Grain Terminal, first tenant of the $5 million Vicksburg Harbor industrial district.

The terminal, which is set for operation about March 1, 1962, will have 100,000 bu. storage capacity initially, but future plans call for an increase to 1 million bu.

Included will be barge unloading equipment designed to load directly from barge to truck or rail. It will be designed for two-way operation so that grain purchased from farmers in the Vicksburg area can be loaded into barges for shipment to New Orleans. Towing Service, Inc., Greenville, Miss., of which John R. Pepper, Memphis, is president, is constructing the facility.

REDISCOVERY

Four feeders prove to themselves that Stilbosol remains most profitable beef gain booster

How do you know if you're following the right feeding program? Well, one way is to get absolute proof you're doing the best you can. For one reason or another, these four cattle feeders quit feeding Stilbosol in their cattle fattening rations. Today, they are once again feeding Stilbosol. They rediscovered the fact that Stilbosol means extra dollars in their pockets. Their stories make for some mighty interesting reading.

"Our cost of gain went down 4¢ a pound when we put Stilbosol back in our ration. We're feeding Stilbosol again... this time for keeps," reports Don Sanderson, S & J Feedlots, Norton, Kansas. "A man couldn't last in this business if he didn't feed Stilbosol. Oh, sometimes he can make a profit if the margin is high enough, but in the long run he's going to go broke."

"We're feeding for profit, and Stilbosol helps us make it. We discovered that we have to feed Stilbosol if we're going to compete," answered Stanley Hurst, Manilla, Indiana. "To stay in this business, you've got to produce as economical as possible. From our past records, we figure we get about ½ pound extra daily gain when we feed Stilbosol. That's for both steers and heifers."

After seven years, Stilbosol continues to give cattle feeders an extra 15% gain on 10% less feed.

"We used to feed Stilbosol. Our first lot of cattle after quitting Stilbosol averaged about 2.5 pounds per day. On the first lot after we went back to Stilbosol... and under almost the same conditions... we got an average of three pounds per day. We figure Stilbosol gives us an extra 100,000 pounds of beef every year. This is based on feeding 1,500 head a year," said Wilbur "Bo" Foster, Auxvasse, Mo.

"I quit feeding Stilbosol for a spell last year. Went back to it though. Why? Because Stilbosol gives us an extra ½ lb. daily gain," stated Jack Dunlap, professional farm manager, Williamsport, Ohio. "You've got to keep abreast of things in this business and you've got to take advantage of developments like Stilbosol. I'll tell you one thing—I know Stilbosol makes us money."

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Hard Work Will Be Major Need In '62; 'The Government,' Low Prices, Credit Stand in Way

By FRED E. TUNKS
Feedstuffs News Editor

Anybody and everybody in the feed business has a lot of hard work cut out for him in 1962. That's what answers to this year's annual Feedstuffs outlook survey indicate it will take to get along profitably in the new year.

This greater effort, say many of the survey respondents, will be concentrated in sales and service. Integration stands out strongly, too, in what respondents think feed manufacturers will stress in 1962 as methods of developing increased business or tonnage. "Captive business" is what it appears a good many feed manufacturers in all regions will be after in the new year.

"The Government"; low prices for broilers and turkeys; possibly lower prices for eggs; other commodity price uncertainties, credit problems and integration by others will be breathing down the necks of many feed men as they roll up their sleeves and dig in. It is these factors which a significant number of surveyed feed men say will be major obstacles and competitive factors needing the most attention in the new year.

Hard work is nothing new to the feed industry, so the first-mentioned conclusion need not be anything to worry about. Perhaps of greater significance is in what specific areas of sales and service will command the most effort.

Customer Programs

Digging deeper into the big stack of returned questionnaires, we find there will be great emphasis in 1962 on customer programming—that is, providing the customer with all the feeding, management, breeding, housing and financing advice possible. This service package approach, say feed men representing large, medium-size and small operations, will do much in the way of convincing the feeder that he needs the feed man.

It looks as though the feed industry's sales efforts will become more "professional" and "personal" in 1962. More professional because respondents indicate salesmen and dealers will be better trained because they must be able to provide the sound advice the customer wants. More personal because feed men will be visiting farms and then talking with their customers more often.

A regional manufacturer in the Northeast, for instance, says his firm will be placing "more and more emphasis on service to individuals." And a local manufacturer in the Southeast says the only way he can increase sales is by "hanging my foot in the fence" on the farm.

Survey respondents indicate that feed men will be more aggressive in 1962. They'll be out there on the farm pitching for orders before the farmer has a chance to make an unsolicited purchase decision.

While some larger manufacturers will work harder than ever with their dealers, there are others whose plans for 1962 include more direct selling.

Integration

For many the answer to the question of how to develop greater feed tonnage apparently lies in integration—contract feeding or actual ownership of broiler, layer, turkey or even hog or cattle feeding facilities.

A multi-regional manufacturer believes the creation of "captive markets" through ownership of end product marketing facilities and the animals themselves, primarily poultry, will be stressed industry-wide in 1962.

What other methods or practices are feed men likely to turn to or continue with renewed vigor as they push along in a new year? Well, for one thing, some are going to do all they can to cut costs and become more efficient so they can make quality feeds at lower cost. Competitive pricing is seen as a major factor. In some cases this will mean cutting down on the number of different rations manufactured. Also, there are some feed men who believe that if they modernize their operations a bit with new machinery and other facilities they can cut costs.

Although it may seem "old hat" to feed men who have sold feed in bulk for some time, there are still a great many feed men who are thinking about switching some of their production to bulk or expanding bulk feed services they have now. Pelleting of feeds is on the list of sales boosters from some feed men, too, as is putting more effort behind sales of complete feeds, while some others, including local mills as well as larger wholesale-type companies, will stress concentrates.

Obstacles

Now, turning to the things that feed men say their industry will find standing in their way, we find overproduction and low prices for some end products, like turkeys and broilers; "The Government" and either "careless" credit or the shortage of good credit risks stand head and shoulders above a long list of obstacles seen in the outlook for 1962.

Most of these obstacles aren't new, but the appearance of "The Government" on the list is many times more prominent in this year's survey than last year's. Many respondents want government interference cut to the bone. Many want the government to stay out of "my business." Some voiced objections to marketing orders.

Another major obstacle mentioned frequently by respondents is what they call the rising cost of doing business. It takes more money to run their business, they say, because equipment prices and labor and transportation costs have gone up. And they expect these costs to keep moving upward.

Also in this connection, some feed men compared rail and barge freight rates of different regions.

While, as mentioned before, some feed men believe integration is important for them, others say integration is an obstacle. There are also differences of opinion when it comes to direct selling and feed pricing. Direct selling is what some feed men feel they must work against, while for others, it is their standard way of doing business. Narrower price margins are something to fear for some trade representatives, but for others closer margins may be among the means they have selected to help them increase volume.

On-the-Farm Mixing

On-the-farm mixing still is a tough problem in some areas—perhaps more so than ever. But as one respondent noted, "Well-formulated feeds will be more and more in demand as agricultural colleges let up on advising feeders to mix their own feeds." Some feed men plan to counteract on-the-farm mixing with on-the-farm selling. "We will be concentrating more and more time on direct solicitation of the large user and buyer," said a midwesterner. Some respondents believe it is up to them to show the feeder—large or small—that he can save money by letting the feed man do his feed formulating and mixing.

Co-ops Mentioned

Cooperatives were mentioned by 10 respondents as being competitive obstacles, but there were also several (apparently co-ops) who indicated efforts to increase business would be through cooperative outlets.

Five respondents said over-expansion of manufacturing capacity was responsible for some of the industry's problems. Also placed in the obstacle category: The "low morale" of producers and "the national economy."

There was quite a bit of similarity among feed men representing different regions in what they believe appear to be the most outstanding opportunities and the toughest obstacles. This national resemblance was indicated even though there may be differences in feeding practices and types of industry operations. However, some respondents are largely integrated, and for them concern about poultry end product prices, for example, might be considerably more important than for other manufacturers, or they might not comment on general methods of increasing tonnage.

To give readers an idea of what some surveyed feed men specifically said about industry opportunities and obstacles in 1962, Feedstuffs selected the following as examples of answers to the two questions which concern these topics:

What methods of developing increased business or tonnage do you think will be stressed by feed manufacturers in 1962?

MULTI-REGIONAL — "Professional selling—direct contact with consumer (not necessarily direct selling)."

"Continued integrated programs or guaranteed grower programs, but also more and harder selling for 'face' business."

"The creation of captive markets—ownership of end product marketing facilities and poultry. And stressing means of reducing production costs."

"More on-the-farm feeding and management counselling by feed service men. Special emphasis on improving dealer service to customers. Continued research to increase feeding efficiency."

"New and improved dealer performance."

NORTHEAST—Regional: "I don't know about the others, but in our case personal contact is the best method."

"(1) Non-contract sales through dealers and (2) more emphasis on customer service."

"Much merchandising at the 'personal call' level. More and more emphasis on service to individuals."

"More emphasis on pelleted dairy feeds and high energy dairy rations."

"More sales effort and narrowing of margins."

State: "Mostly related items plus integration."

"Sound economics and compliance with FDA regulations."

Local: "Probably crazy credit deals."

"Second and third line feeds with low prices."

SOUTHEAST—Regional: "More farm calls, hence additional direct selling."

"More financing."

State: "We will stress increased nutrition service."

"More bulk deliveries—cheaper feed by reducing costs."

"Integration."

"Increased emphasis on diversification and increased financing in swine production."

Local: "We will stress feeding programs more than ever before, along with personalized service."

"Concentrate sales to farmers for on-the-farm mixing; more and better bulk feed services; more on-the-farm calls by feed company representatives."

"I am a very small country miller. The only way I can increase sales is by 'hanging my foot in the fence'—personal calls."

"Closer cooperation with retailers."

"Increased integration."

"Not sure it will be an increase in tonnage, but believe there will be slightly more direct feeding of livestock and poultry."

"More contract programs, especially by major manufacturers."

"Contract feeding."

"About the same as usual, except a few majors will go farther into the production phase (mainly broilers and eggs)."

MIDWEST—Regional: "More efficient formulation, distribution and promotion of economically sound feeding practices."

"Additional marketing services by feed manufacturers; further investment in mixing facilities at local market points; expansion in plant locations by manufacturers for improved service, and expansion in integrated or owned animal production facilities."

"Integration, contract feeding, direct ownership of feeding facilities."

"We will be concentrating more and more time on direct solicitation of the large user and buyer. We will also be pushing more and more complete feeds in pellet form."

"More direct sales effort, more bulk delivery of complete pelleted feeds and better distribution of local outlets."

"Fighting further the corn-soy diet talk which emanates from certain land-grant colleges."

"So-called captive business probably will be stressed more than anything else in the immediate future."

"In our area, by pushing for more concentrates with farm grains instead of ingredients and farm grains."

"Let's stress profitable business, not volume loss business, such as we have had in poultry this past year."

"Share-cropping."

"Probably will just have to work harder, make our sales calls more profitable per call, make an extra call every day. I don't know what the big mills will do, but they could stand a lot of the same."

"We will develop more cooperative outlets."

"Price, promotion and a new approach to management-feeding."

State: "Service to dealers and patrons of dealers."

"We expect to stress feeding the grains and livestock that are raised in the area here rather than shipping out grains to other areas. . . ."

Local: "On-the-farm selling, more gimmicks and more advertising dollars spent."

"By some manufacturers, just good salesmanship. By others, integration—which I consider a scourge to our industry and to agribusiness as a whole."

"More local re-sale."

"Labor cost reduction; accurate mixing of the increasing number of micro-ingredients, and increasing acceptance of the need for micro-ingredients."

"So far as we are concerned in our little spot, we strive to give better service by improved equipment, competitive prices and a little more selling."

"The feeder is interested in only one thing. That is producing a pound of meat or a dozen eggs for the least possible amount of money. I believe they must be shown that proper use of the correct supplements will do just that."

"Selling of complete package programs for all livestock, including buildings, equipment, market, feed and chick (or similar quality product of other livestock)."

"(1) More and various forms of

vertical integration, (2) increased advertising and (3) more feed companies owning test farms to which customers can be taken to see the results of good feeding."

"More service in assisting the feeder to program his feeding, management and breeding. A broader look at a feeder's operation to produce over-all profit."

"Cautious hard selling by better trained salesmen."

"Direct sales to producers and emphasis on use of straight feeds vs. concentrate and grain. Also, credit and financing programs."

"With us, more work—on sales."

SOUTHWEST — Regional: "Well-formulated feeds will be more and more in demand as agricultural colleges let up on advising feeders to mix their own feeds."

"There will be more direct selling from the feed mill to the feeder in all phases of the formula feed business, and quite likely we will see community cattle feedlots built which will increase sales of the local and area feed manufacturer."

State: "Integration; encouraging building of local mixing plants for use of concentrates."

"Better service, better quality, improved and increased production and results per ton; more realistic merchandising."

"We look for large feedlot operations for cattle, and already there are many pullets placed for egg production."

"Good service is all there is left."

WEST—Regional: "Increased service and providing of started pullets, poults, etc. to increase capacity of growers' facilities."

"Some integration in feeding cattle, but the main increase should come from a combination of stressing service and sales efforts."

"Layer programs, wherein the producer will receive X number of cents per dozen eggs produced."

State: "Financing through integration."

"Continued efforts to assist the growers in marketing livestock being fed by the mills."

"Harder selling—and probably taking large volumes of tonnage at lower prices."

Local: "Presently, price rather than quality prevails in this area. There is some evidence that feeding and management assistance can be the best approach."

"In the broiler business: Further integration, acquisitions, mergers. Producers will become processors and last handlers before the retailer."

"Improvement in service and quality; more integration, with feed manufacturers actually owning birds or animals in a higher percentage than ever before."

"Better feeds at low prices."

"Processing barley for drouth area."

"Education."

"Closer tie-ins between growers and miller."

"Bulk and quantity discounts for larger loads at one delivery."

"Some will stress more integration. We expect to stress less integration and more outright sales."

"High energy dairy feeds."

What do you regard as major obstacles and competitive factors to be overcome in developing larger and more profitable business in 1962?

MULTI-REGIONAL — "Over-expansion of feed manufacturing capacity, resulting in unsound merchandising. Government intervention upsetting free operation of the law of supply and demand. Debacle of the broiler and turkey markets. Over-extension of credit and financing."

"Excess capacity in large mills; difficulty of rendering needed services from large mills; ineffective sales and marketing organization, and lack of sufficient customer orientation."

NORTHEAST—Regional: "In some areas there will be pressure on prices due to scrambles for free customers not integrated. Low prices and loose credit policies may result."

"Ridiculous pricing structures and so-called 'bookings' by many well-known manufacturers, apparently anxious to reduce slack running time. Several of the most flagrant offenders are presently members of AFMA (which we are not) which stipulates emphatically against such procedures."

"We are relatively small manufacturers and not able (or anxious) to offer financing which apparently is little problem to large and/or integrated operations."

". . . Getting farmers behind their own enterprise."

State: "Freight rates in Northeast to be equalized to those in the South and Southeast."

"High freight rates in Delmarva and strangulation of progress by unscientific negativism on the part of FDA."

Local: "Cheap prices on cheap mixed feeds."

"Uncertainty of ability of farmers to pay."

SOUTHEAST — Regional: "Carry-over of bad finance practices."

"Regaining tonnage loss due to cutback in broiler and turkey contracting. Showing farmers we can deliver feed as cheap as they can make it on farm."

"Excess credit given by sellers. Over-production of poultry."

State: "More integration and direct sales to consumer. Higher operating costs."

"There is always some new obstacle and more fantastic competition."

"We must work for better markets for poultry and turkeys. Unprofitable feeding will retard feed tonnage."

"Poultry prices and the threat of marketing orders or some type of government intervention."

"Overproduction of poultry and livestock."

"We must work for better markets for poultry and turkeys. Unprofitable feeding will retard feed tonnage."

"Unreasonable credit extension by national manufacturers to gain entry into or expansion of various individual marketing areas."

Local: "Complacency of producers and low morale."

"Unsettled prices, due to government interference in commodity markets, have caused many feeders to decide against expanding beyond their own grain-growing capacity."

"My problems, other than government intervention, are purely of a local nature. With two recent on-the-farm mixing installations, four other local feed mills, one mobile mill and direct selling by national feed companies in our trade territory, I don't find much time for gazing at the big picture."

"In our area the squeeze on small mills which have been producing almost 100% broiler feeds is forcing them into other feed lines."

"Marketing and basic price of meat, milk and eggs."

"Credit."

(Turn to BUSINESS, page 71)

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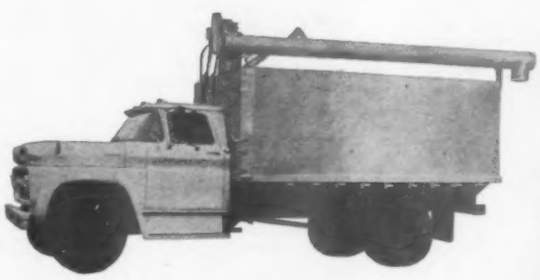

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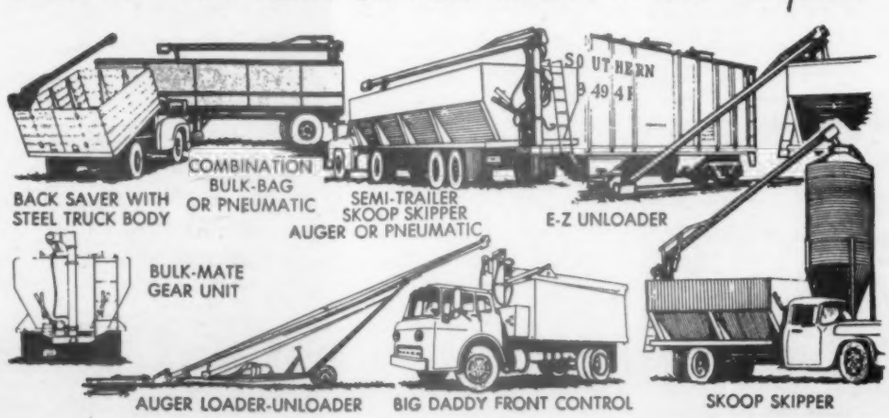

Concentrate Trend Continues But May Be Slowing; Area, Operational Differences Noted

By GEORGE L. GATES
Editor of Feedstuffs

Almost half of the feed manufacturers responding to Feedstuffs' survey expect that a greater portion of their feed tonnage in 1962 will be sold in the form of concentrates, including superconcentrates and premixes.

At the same time, a hefty proportion of the respondents indicated that they anticipate no change, and some feel that they will be selling a smaller amount of concentrates in proportion to complete feeds next year than they did in 1961.

Here is the way the figures total up, nationwide: 102 say they expect an increase, 89 expect no change and 22 forecast a drop. (Details by regions and by type of companies are included in the accompanying table.)

Most of the companies predicting an increase in proportion of concentrate sales look for a 10% increase. The next most frequently listed percentage is 5%, and several look for 15, 20 or 25% increases. The indication of larger gains shows up strongest among the state-sized mills in the Midwest and local mills in the Southeast.

Abundance of feed grains and farm mixing are most frequently cited as the reason for increased concentrate demand. Those expecting no change or a decrease in this demand cite growing interest in complete feeds among their customers.

One might expect that larger wholesale-type manufacturers, particularly in grain areas, would be indicating an increase in concentrates for local or dealer mills as well as for feeders, and that many local manufacturers, even in grain areas, would be pushing more complete feeds for sale to farmers; and, indeed, no doubt this is a broad continuing situation in many instances. However, there are differences from these trends in situations, as shown in the survey returns.

Gain May Be Slowing

It may be concluded that the trend evident for a number of years toward more production of concentrates is continuing. However, the replies to this question this year appear to indicate also that the trend is not accelerating as rapidly as it did in the recent past, at least in some areas and among some types of mills.

For example, replies to a similar question a year ago showed that more manufacturers looked for an increase in concentrate tonnage than looked for a reduction or no change—70 to 66. This year the number looking toward an increase (102) is less than the number expecting no change or a decrease (111). The relatively large number of those anticipating no change—42% of the total—also may be considered as some evidence of a tendency toward leveling off. (Unfortunately a direct comparison with last year's results is not possible since in that survey no provision was made for indicating a "no change" choice. Manufacturers were asked only whether they expected an increase or not.)

The responses of the companies doing business in more than one region—the largest firms in the business—show these differences in turn-of-the-year expectations: This year 3 out of 10 look for an increase in concentrate sales in relation to their complete feed sales. A year ago 8 out of 12 looked for an increased proportion. Four now expect no change and three look for a decrease.

The mills classified as regional operations, however, indicate different expectations. Thirty-two look for an increase and 25 expect a decrease or no change. As would be expected, the "ups" and "downs" vary considerably by regions, with the regional-size mills in the Midwest and Southeast indicating most strongly the expectation of relatively more concentrate sales in 1962.

The returns from the smaller companies—state and local operations—are more difficult to analyze. However, some significance may be attached to the indication that while 14 local mills in the Midwest look for relatively more concentrate business, 16 expect no change and four look for a downturn. A year ago 10 out of 12 expected an increase in their own concentrate tonnage relative to complete feed sales.

One of the local midwestern millers who looks for a decrease, comments: "Interest in complete feeds for commercial feed operations seems to be increasing in our area. Many feeders have found that on-the-farm mixing has a lot of limitations and does not always reduce cost."

OUTLOOK

While the swing to concentrates may be leveling off somewhat for some midwestern local millers, relatively more local operators, 11 out of 19, in the Southeast look for an increase in concentrate demand, reflecting increased availability of local grains for farm mixing. Regional mills in the Southeast also look for increased use of concentrates, a tendency already indicated by earlier surveys.

Important Shifts Indicated

There is no doubt that increased demand for feed in more concentrated form will continue to be a big influence on business in 1962, but some important shifts in respect to the types of mills turning out such concentrates appear to be in the mak-

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ZINC BACITRACIN IN CATTLE FEEDING

The results of feedlot tests using Zinc Bacitracin as a growth-promoting feed supplement for beef cattle are presented in the table at right. These tests were conducted by both public and private organizations over a period of three years. The three columns at the far right show the percentage of improvement of Zinc Bacitracin-fed fattening cattle over the control group.

The tests show that, when used at levels from 70 to 120 milligrams per head per day, Zinc Bacitracin increased daily weight gains by an average of 7.4% and improved feed efficiency by 6.4%. Lower levels of Zinc Bacitracin (35-40 milligrams per head per day) increased weight gain by 3.0% and improved feed efficiency by 3.4%.

The testing organizations reported that Zinc Bacitracin reduced the cost per pound gained by an average of 6.1% at the high levels, and 3.2% at the lower levels.

Tests on cattle and on heifers are continuing and as further results are obtained they will be presented by the Animal Nutrition Department, Commercial Solvents Corporation, 260 Madison Avenue, New York 16, N. Y.

SUMMARY OF

Location of Test	
Large Commercial Feedlot (California)	
Montana State College	
Midwest Agr. Expt. Station	
Nutritional Service Associates (Test No. 1 – California)	
Midwest Agr. Expt. Station	
Southeastern Agr. Expt. Station	
Montana State College (1958-1959)	
Montana State College (1959-1960)	
Montana State College (1959-1960)	
Nutritional Service Associates (Test No. 2 – Arizona)	
Kansas Feedlot Operator	
Commercial Feedlot (Iowa)	
Missouri Feedlot Operator	
Nutritional Service Associates (Test No. 3 – California)	

ing. On the other hand, the substantial expectation of "no change" in demand along with some increase in expectation for more complete feed tonnage very possibly reflects increased amounts of integrated or contract operations which involve complete feeds.

Also, at least some manufacturers are finding more ready acceptance of complete feeds as independent feeding operations grow in size, even though demand for concentrates by farm mixers and feeders who prefer free choice concentrates to feed with their own grains remains as an imposing marketing factor.

Here are some comments of manufacturers which throw considerable light on the reasons for varying expectations in respect to concentrate demand:

Reasons for Increase

Northeast—"Large local corn crop and poor conversion ratio."

Northeast—"Some increase in their use through installation of mixing and grinding units on farms."

Southeast—"Large corn crop to be mixed by farmers in early months of 1962."

Southeast—"Up by 40%. We moved into a new mill that converts the majority of our inbound ingredients to bulk and we expect to switch our outbound tonnage to bulk as fast as we can."

Southeast—"We have just begun supplying other mills in this area with a super-concentrate program. We expect their business to grow but it's hard to project growth of another firm's operations."

Southeast—"Because of home mixing units with grain."

Midwest—"Depends on how much more our complete ration business increases. With bulk feed and some automation we should double or more our complete ration business — hog and cattle, no poultry."

Midwest—"Bumper corn crops in Midwest will discourage complete feeds."

Midwest—"In our area the trend is now starting toward less complete rations being furnished by the supplier. Along with that the trend is toward more efficient feeding practices. More and more feeders are becoming more interested in a balanced nutritionally efficient ration, and more fortified supplements will be used."

Midwest—"Would not wish to say as to amount, but our concentrate business is on the upswing now. We do expect this trend to continue at least through March."

Midwest — "Farm proportioning mills up, particularly in egg houses."

Midwest—"Will be less all-mash feeding."

Midwest — "Greater supply of grains."

Midwest—"Some 75% of our business is already in this category."

Midwest—"Farmers have lots of corn."

Midwest—"Larger grain supplies, plus the cost-price squeeze, would seem to indicate an increase in concentrates."

Midwest—"There is a continuing, steady trend with us—not an avalanche, though!"

Southwest—"In this area, corn-soybean feeders are turning more to formula feeds."

West—"Will be feeding more hogs and cattle."

West—"Due again to increase in beeflot feeding."

Reasons for Decrease

Midwest—"Trend to complete pellet feeds."

Midwest—"We are just starting to market complete feeds."

Midwest—"Interest in complete feeds for commercial feed operations seems to be increasing in our area. Many feeders have found that on-farm mixing has a lot of limitations and does not always reduce cost."

Midwest—"Our concentrate volume will be less percentage of the total because of greater emphasis on complete rations. We can do this where we go direct to the feeder."

Southeast—"Reduction in broilers. Some increase in hog feeds."

Expect No Change

West—"We are a small, independent feed manufacturer. We sell direct, consequently sell very few concentrates to dealers. Most of our tonnage is in range and drylot feeds (beef). A complete supplement to be fed with their grains."

Midwest—"We feel our complete feed tonnage will be up. Complete feeds in pellet form handled on a bulk basis is becoming more and more popular."

Midwest—"Higher farm support prices may encourage more complete feeding or at least hold even with this year."

Midwest — "Whereas concentrates are continuing on the increase and particularly superconcentrates, the complete feeds tonnage is also on the increase because of contract type of feeding along with necessity for financing. Yes, one affects the other and no major change in percentage will take place in 1962."

Do you expect the proportion of concentrates (including superconcentrates and premixes) to complete feeds in sales to be up or down in 1962?

Type of Business	Up	No Change	Down
NORTHEAST			
Local	6	9	0
State	2	6	1
Regional	5	5	1
Region totals	13	20	2
SOUTHEAST			
Local	11	6	2
State	6	5	1
Regional	4	0	1
Region totals	21	11	4
MIDWEST			
Local	14	16	4
State	12	5	3
Regional	18	5	3
Region totals	44	26	10
SOUTHWEST			
Local	0	2	0
State	4	3	1
Regional	4	7	0
Region totals	8	12	1
WEST			
Local	10	19	2
State	2	4	0
Regional	1	3	0
Region totals	13	16	2
MULTI-REGIONAL	3	4	3
GRAND TOTAL	102	89	22

ZINC BACITRACIN CATTLE FEEDLOT TRIALS (1958-1961)

Duration of Test (Days)	Total No. of Head: Control	Total No. of Head: Treatment	Level of Zinc Bacitracin (Mg/Hd/Day)	Diethylstilbestrol Fed	Percent Improvement Over Controls: Average Daily Gain	Percent Improvement Over Controls: Feed Efficiency	Percent Reduction in Cost per Pound Gain
92	60	60	35	None	4.9	4.0	4.0
84	75	73	40	None	0.8	—***	—
152	10	10	35	Implanted	3.4	2.7	2.5
Total—145		143			Average—**3.0%**	**3.4%**	**3.2%**
Note: Above figures summarize tests using 35 and 40 mg zinc bacitracin per head per day. The figures below summarize data using 70 to 120 mg zinc bacitracin per head per day.							
133	90	73	80	Implanted	3.5	11.4	10.4
152	10	10	70	Implanted	2.6	2.7	2.5
111	5	5	70	None	10.0	—	—
109	80*	80*	70	None	8.3	—	—
84	75*	78*	80	None	7.1	—	—
84	75*	78*	120	None	8.7	—	—
83	131*	136*	70	None	5.0	6.1	5.3
96	151*	104*	70	None	21.0	—	6.4
148	25	24	70	10 mg/hd/day	2.7**	—	—
135	58	59	80	10 mg/hd/day	2.9	5.3	6.0
122	38	38	72	Implanted	4.6	—	—
Total—738		685			Average—**7.4%**	**6.4%**	**6.1%**

*Heifers

**Control Lot was fed 70 mg/hd/day chlortetracycline – not included in average.

***Blanks appear where no measurements were made.

The Changing Feed Industry—What Some Feed Men Are Thinking and Doing About It

Examples of Developments and Trends

By Roger Berglund
Feedstuffs Managing Editor

EDITOR'S NOTE: ***The accompanying article covers many aspects of current and prospective developments in the feed industry, with emphasis on examples of what various feed and integrated operations are doing or planning. The article is adapted from a talk presented at the California Animal Industry Conference. It is based primarily on reports, stories and articles which have appeared in Feedstuffs. While the article gets into many economic developments, it does not touch upon the government control question, which has had so much attention in other reports.***

Usually it's a good idea to take a look at the past and present before making any forecasts of what's likely to happen in the future. Perhaps that is why good historians generally are the best prognosticators of world and national developments.

So, as the feed industry moves into a new year, it may be worthwhile to offer a quick glance at some of the current industry developments, thus providing a sort of do-it-yourself kit in forecasting.

Obviously enough, situations vary greatly among different types of firms and different areas, but examples of what people in the feed industry are thinking and doing in various types of operations can be of interest and help as one contemplates the future.

We will dispense here with the generalities—such as the fact that there no doubt will be more integration, in poultry in particular, before there is less. Rather than present a broad dissertation on trends and developments about which we hear so much, we will mention specific illustrations of various developments.

Before doing this, it should be added parenthetically—or not so parenthetically—that much of what might be brought out in the way of major developments can be tossed through the nearest window if government controls are adopted and widened in scope. This would put many possible economic developments in a new light—or shadow.

Also, before getting specific, let's repeat a couple of general statements which are significant at this time. The other day, the American Feed Manufacturers Assn. board chairman commented, "Today, as never before, the position of the middleman in American agriculture is being challenged. Despite the fact that our industry has made continuing and tremendous improvements in the products we sell, with ever better results being realized by our customers, and despite the fact that our

service to customers is better than ever before, we have not escaped this pressure."

Actually, doesn't about everything one might discuss relate to this development—whether it is vertical integration, or farm mixing in some areas, or lower margins, or what services to provide, or changed distribution patterns?

In considering industry structure and patterns on a long range basis, another basic observation is pertinent, too. The observation, by the AFMA's economist, is this: "In general, the feed distribution method likely to be most prevalent in the years ahead will maximize efficiency through the entire process of obtaining ingredients, producing the feed and distributing it to the point of consumption. The most efficient method will tend to be the one which requires the least labor, the least cost of transportation of ingredients and feed combined, and will minimize the number of times ingredients and feed will be handled."

Some of what will be mentioned will reflect this general continuing development, but one will note a good many contradictions as we go along. In the changing feed business, it seems that for every way of doing business, someone has an almost completely opposite way; for every trend, there is a counter-trend. What may seem economically sound on a broad basis may not be the thing that is working out in specific cases.

If one could hold up a mirror as he flipped through the pages of Feedstuffs for the past year, here are some of the reflections he might get:

CONCENTRATES VS. COMPLETE FEEDS—Some of the most successful feed manufacturers in the grain areas in particular have emphasized concentrates or super-concentrates for feeders or local mills. And, indeed, the concentrate portion of total registered feed tonnage has been increasing.

Some feed men observed that, among larger wholesale-type manufacturers, the amount of super-concentrate or premix which is provided for local mills is relatively greater than is generally acknowledged.

However, as one southeastern expert noted, increased use of concentrates is far from a universal trend, or is not necessarily economically sound in all areas. Two-stage manufacturing or mixing may be sound in some less concentrated or less specialized areas, but it can have cost disadvantages, as has been shown, in concentrated feed use areas. This expert looks for highly efficient mills, of perhaps 60,000 tons a year, to prevail in some sections, perhaps supplying feed to integrated grower-processors who might prefer to leave the feed business to specialists. He says more mills eventually will produce pelleted feed for nearby feeding operations at a total manufacturing and administrative cost of no more than $3 or $3.50 per ton.

When concentrate manufacture is increasing, it is, of course, largely in grain areas, and frequently it is by larger companies or plants, which ship to local or dealer mills. Many smaller manufacturers and dealer-mills emphasize complete feeds for nearby feeders. However, some firms, small as well as large, are streassing sales of concentrates to feeders, who may feed free choice or combine the concentrate with grain themselves.

SATELLITE MILLS—In general, the trend has been toward decentralization, toward smaller manufacturing or mixing plants serving nearby areas. Even where emphasis is on making concentrates for dealer mills, one firm is betting on central plants producing no more than 100 tons per eight-hour day. Some talk about satellite mills and shipping concentrates or base mixes to other mills and, of course, this is being done successfully.

"The trouble is," said one feed man, "that there already may be mills making feed from the ground up in a particular area. And if they are doing a good selling and service job, they may be in a position to beat the double-handling operation."

DEALERS—Attrition among dealers continues but many continue to do a strong, effective job in the grain areas in particular, providing grain banking and other services for which they justify their margins. Nevertheless, the general trend is more direct delivery of feed from plant to farm.

Some larger firms with dealer organizations have continued to do very well; some have not. One feed company is said to have found that in a certain area, it had 65% of the customers but only 12% of the volume. The shift in volume customers occurred gradually, but over a relatively short period of time.

Regardless of the industry structure in particular instances, many were the reports of how, in non-integrated operations, a feed man who could do a good job of helping his customer make more money through his programs and services was progressing.

In some areas, dealers now perform only a trucking function, perhaps hauling feed for a number of manufacturers. The dealer may truck feed from rail car to growers, getting $4 per ton for bagged feed, $2.50 for bulk. Or, some dealers may just handle orders and some service, for a small margin.

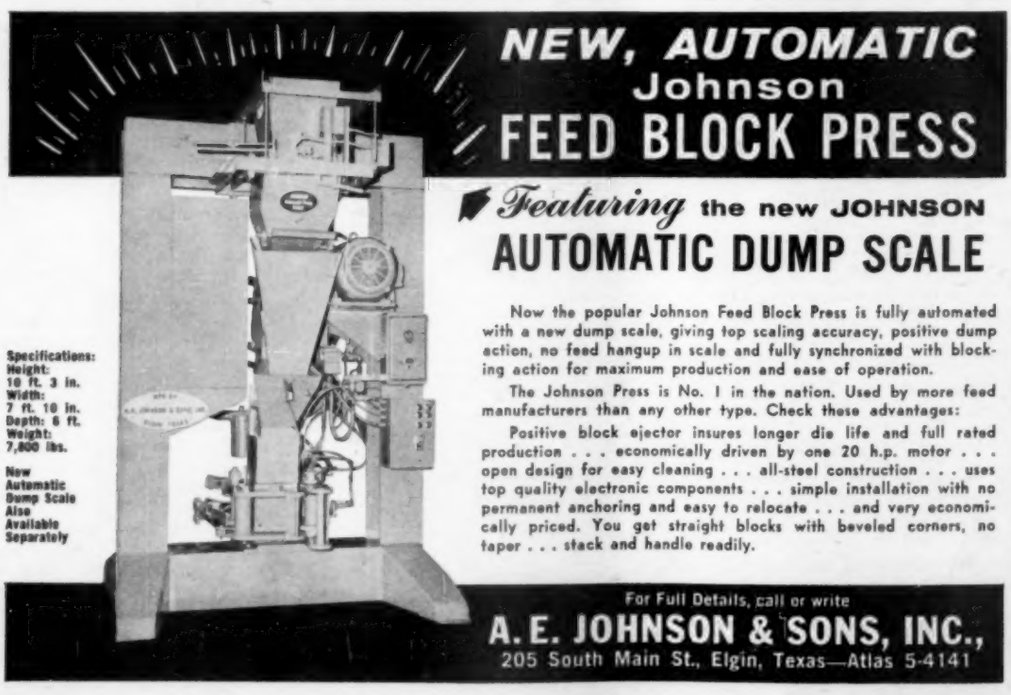
While dealers may be diminishing in numbers, there are still some strong firms committed to the dealer concept and making it work in grain areas particularly, with the emphasis on dealer mills. This includes the so-called franchised manufacturers which make registered complete feeds with the manufacturer's concentrates or base mixes, in addition to the conventional custom operations and the mobile milling operations.

To help improve and maintain the status of this type of organization, some companies now conduct effective seminars or schools for dealers, covering the specifics of mill operations as well as sales and service and nutrition and financial management.

One organization has a special department which provides engineering and mill planning help for local mills. Another feed company has developed plans for a prefabricated packaged mill for dealers.

In other areas, including parts of the concentrated production areas of the West and East, the dealer is practically non-existent or of lesser importance. Some feed men in such sections say they carry a major line only because of the help on financing. Other local manufacturers in such areas say the larger wholesale type firms are the least of their competitive worries.

In the Midwest, a feed man, talking about direct vs. dealer selling, argued that a supplement sold by his dealer cost the farmer no more than a similar supplement offered by a direct selling firm. Another feed man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countered that it is results, money in the bank for the farmer, that count, and that his specialized, direct selling organization did a better job in all phases of distribution and service for the margin and price received. Countering that again, one feed man said that as feeders grow in size, some of them will not be willing to pay the price charged by higher-margin firms which stress service.

And so it goes. At any rate, different farmers need different things, and regardless of who provides the service, dealer or manufacturer, if the farmer makes more money as a result of the service, how can one argue about it? In the long run, it is still results that count.

SERVICE AND BUSINESS HELP—Service and help on feeding programs and management continue to get more and more emphasis in some of the grain and livestock areas in particular. There also is more of the "business engineering" help, too, with some firms working out complete financial systems or programs for dealers or feeders.

At any rate, there is more program selling—developing and selling farmers on complete production programs. More recently, the program often takes in help on marketing, too—helping to find end product markets, or getting into coordinated if not vertically integrated projects.

The pages of Feedstuffs the past year have told of many instances where local feed men become the market for the farmers' eggs and sell or arrange for sale of the predetermined supply to consuming centers.

Speaking of business service, one company has developed special financial planning forms and used them successfully. The salesman sits down with the farmer and works out a complete plan for a year. This shows prospective income and when it is expected, and it shows credit needs and where and when the money will go, even including payments on Mother's new automatic washer. One result is less credit extension by the feed firm.

Emphasis on local mixing of supplement and grain was mentioned, but there is still a lot of free choice feeding among midwestern livestock farmers. One company has a program stressing the economies of free choice feeding of swine. Others mention, too, simple combining of supplement and grain in feed wagons on the farm.

It is interesting to note, too, how service programs can vary within a particular area and how contrasting operations both can be successful. In one egg production area, for example, one feed manufacturer has no salesmen or service men and provides virtually no service for big producers who want feed only, and at low margins. A few miles away, another manufacturer, apparently catering more to somewhat smaller producers, is building a business in which services include help on culling, vaccinating, etc., plus provision of started pullets, plus egg processing and marketing.

There is more than one way to skin a cat.

DIRECT SELLING—In some sections, of course, this long has not been much of an issue or question. Relatively large company or small, the feed is likely to move directly from mill to farm or ranch, including non-integrated as well as integrated operations. In other areas, it remains a major question among dealers and manufacturers with dealer organizations.

In the Midwest, one of the fastest growing organizations is one whose products are concentrates mixed at the local mill or dealer level.

In the same region, another firm, also growing fast, increased its business 20-times over in a 10-year period, and sales for the current year are up another 40%. This company sells direct only, through company salesmen and warehouses. The firm is, as one man put it, internally integrated, from ingredient purchasing to delivery of feed to the farm. This company's business is almost entirely in supplements and concentrates for free choice feeding or mixing on the farm. It discounts entirely the idea of the grain bank or local mixer.

"CUSTOM" MILLS—Grain banking, however, is not without tremendous growth. Some farmers may not have farm storage for grain or do not want to go to town for custom mixing; they may prefer to put their grain in the local elevator and have mixed feed delivered as needed. News reports show how this type of operation has increased by the thousands.

At the same time, there is an increasing number who contend that grain banking is not worth the time and trouble involved. They have tossed their grain bank record card systems in the waste basket; they feel the same way about conventional custom grind and mix operations. Some firms, both local retail manufacturers and dealers using larger manufacturers' concentrates, sell complete registered feeds and feeding programs. Frequently the feed is pelleted. They buy farmers' grains or swap feed for grain but do not do much custom work or have grain banks. One feed manufacturer has recently promoted the concept of "hub" feed centers among dealer mills, with complete feeds, ready to go, serving farmers within a 20-mile radius.

Regardless of the system or industry pattern, frequently one sees individual communities where a particular feed man, through his products and services and promotion, will largely dominate the market, even though the business obviously is highly competitive.

MORE "CONCENTRATION"—As things get more competitive, quite a few feed manufacturers, in addition to selling conventional protein concentrates, now offer more concentrated products also—base mixes, super concentrates, premixes or what have you—products where the local mill puts in part or all of the protein as well as the grain. This sort of thing can whack tonnage, and one manufacturer pointed out the problem of getting enough margin on such products to justify financing help as well as nutrition, advertising and other aids.

In the Midwest, a new company has been formed to provide base mixes, bags, tags, nutritional help and other aids for franchised manufacturers and dealers of the firm's brand. They'll make no complete feeds or supplements themselves. Others have been doing this sort of thing also.

A feed manufacturer serving a livestock area feels it will be necessary to offer varied products in order to serve producers of various sizes and abilities. The average swine producers will continue to be sold on conventional supplements. For somewhat larger producers, the firm may offer base mixes, with the farmer add-

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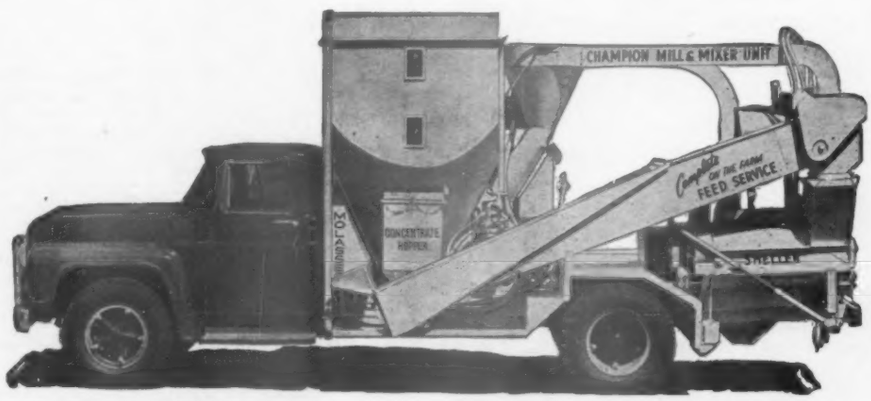

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ing some protein as well as grain. For still larger producers, it is likely that premixes will be used. The critical feeds for young pigs will continue to be complete feeds.

Some feed men pointed out the success of super concentrate or concentrate programs in areas of grain and livestock and dairy operations. And some mentioned promotion of higher protein concentrates for livestock, with the feeder using less per head. However, in some grain deficit areas and areas of concentrated production, the trend is away from this, with more emphasis on complete feed. The producer can buy complete feeds or grain rations at low margins and cannot afford to be troubled with mixing himself.

DECENTRALIZATION—With increased transportation costs and a more competitive business, decentralization has, obviously, been a significant development among some multiple-plant firms. In its annual report, a major firm reported improvement in feed operations as a result of decentralization moves and changes in distribution patterns. Some firms have each plant run like a separate company, with local responsibility and authority. Why try to cover big areas with a broad shotgun sales program? Some feel it's better to concentrate on doing the most competitive job in a nearby area.

Some organizations have closed bigger plants and are concentrating on smaller mills and distribution centers. Also, toll milling has increased. A company may be able to hire its feed made in an efficient plant and put its capital to work in sales or production or marketing programs, and can be more flexible. One feed man told how, when his mill was closed by a strike, he found he could have feed made by others more cheaply than he could do the job himself.

A big cooperative has decentralized management and staff activities. There are now several offices, each close enough for any farmer to discuss his problems with the local manager.

SPECIALIZATION — Reduction of the number of feeds and specialization in just feed manufacturing have lowered costs for some. A production man with a larger firm said he was surprised himself to see how economically feed could be produced when only a few feeds were made for a specialized poultry area. In a southern plant, he said, they turned out feed for a total cost of less than $2 per ton, including labor, power, depreciation and plant supervision.

Some firms in the East, Southeast and Far West—including some integrated operators—have been specialized for some time, of course, and margins and costs per ton are considerably lower than in other areas.

Reflecting specialization in agriculture itself, a full-line regional firm reorganized its sales department completely. The company eliminated division sales managers who had worked on a territory basis; these men were replaced with key product managers or supervisors.

Many feel numbers of feeds in a line must be reduced to improve efficiency and profits. An economist took a specific firm and applied some electronic computer analysis to the operation. He said net earnings could be more than doubled if there could be an increase in volume on 28 feeds, a decrease on 13 and no change in 3.

Speaking of numbers of feeds, some midwestern firms, not getting into integrated poultry programs but watching farm flocks decline in importance, are now putting much more emphasis on cattle and hog feed programs. Livestock feed is the basis of their business, a situation considerably different from several years ago.

PRICING AND MARGINS—How about pricing of conventional feeds? One successful midwestern firm points out that it has a uniform price to all customers. Others say they are increasingly concerned about what they call more realistic pricing policies based on costs and services, at least among dealers who may not have moved fast enough in this regard. For example, dealers are reminded that if there is no credit involved, if little or no service for some big producers is provided, there should be lower prices and margins than for other farmers.

At any rate, there continues to be pressure on margins for many firms. And while many may feel that they are low now, some may find that they'll get still lower, at least in serving larger, specialized producers, as has been done in concentrated production areas like California.

Some specialized operators mention break-even points or margins of only a relatively few dollars per ton, and some point out how firms with greater overhead have not been able to compete at all in some locations.

Very few, if any, feed manufacturers in the Midwest or East have got into large scale manufacture of feed on a bid basis for buying groups, at a low margin over ingredient cost, at least as it is done in California. However, as noted in Feedstuffs' 1961 outlook survey, at least some are willing to take a look at this sort of thing or have modifications of it. Most strongly oppose it, but some claim that high volume, low margin operations with little or no sales or service costs can sometimes yield a better return on capital investment than more conventional operations.

A local midwestern manufacturer, afraid of losing the business of some bigger hog feeders, offered a plan where he would sell and deliver pelleted swine feed in large amounts at a charge of several dollars per ton over ingredient costs.

COMPENSATON—As agribusiness changes, some feed men have been concerned about salesmen's compensation plans, pointing out that in the case of a big sale, the real work may be done by headquarters, technical and other experts. However, some salary and merit systems apparently have not always been so successful as the straight commission system where the "hungry" salesman seems to have a more direct incentive.

NEW COMPETITION—How about new competition in the industry? There still are many mills being built, especially smaller plants, and the over-capacity situation has been mentioned more recently. But new firms or mills within the conventional industry aren't the only factor. Reports the past year have shown numerous instances where a big livestock feeder makes feed for his own animals and then decides to sell to his neighbors, too. For example a southwestern plant turns out some 40,000 tons a year. Of this, 15,000 to 18,000 tons go to the man's own custom cattle feedlots, with the remainder sold commercially in the trade area.

PERSONNEL—No business is any better than the people in it. In this connection, there are a few recent examples of changes in type of personnel, in some cases reflecting the importance of marketing and financing.

A firm looking for a new sales and marketing manager didn't hire an experienced feed man; it employed a man who had been in sales promotion with a meat packer. . . . A company looking for a general manager didn't go to the feed industry; it hired a man from a management consulting firm. . . . Another company has as one of its top men a person whose specialty was finance and law. . . . One company has top executives whose business background was in other fields, and its sales people are almost entirely company-developed; it prefers not hiring salesmen who have been with other feed companies. . . . A feed division salesman with one company got his start in the firm's grocery products division; now, in the feed division, he spends more time contacting supermarkets on eggs and poultry than he does selling feed as such.

FARM MIXING—Farm mixing of feed, even on rather average size farms of the Midwest, has received a fair amount of attention. However, in general, interest in farm mixing from the ground up apparently has lagged; it has not been the threat to the conventional feed business that some had assumed. Many feeders still prefer a protein supplement for home mixing or local mixing, rather than building feeds from premixes and their own ingredients.

However, as feeders increase in size and specialization, some have special programs. A midwestern manufacturer, aiming to hold supplement sales at least, has a special program for some large poultrymen; he promotes use of a grind-mix unit and sells supplement to the poultrymen, by-passing his dealers in this case. On the other hand, one midwestern dealer has gone into the ingredient business in a big way, selling protein and other ingredients to larger hog feeders or buying groups.

One feed man feels that grinding and mixing units are unsound for many farmers, and he has promoted complete rations and grain-swap programs. But if some farmers do have mixing facilities, he tries to join 'em instead of licking 'em, selling them on the wisdom of using a concentrate and his services instead of making feed from the ground up.

While many have been successful in offsetting farm mixing with grain banks for complete ration programs, others are putting continued or new emphasis on concentrates for farmers for free choice feeding or blending at the farm level. One midwestern firm says it expects to increase

(Turn to INDUSTRY, page 74)

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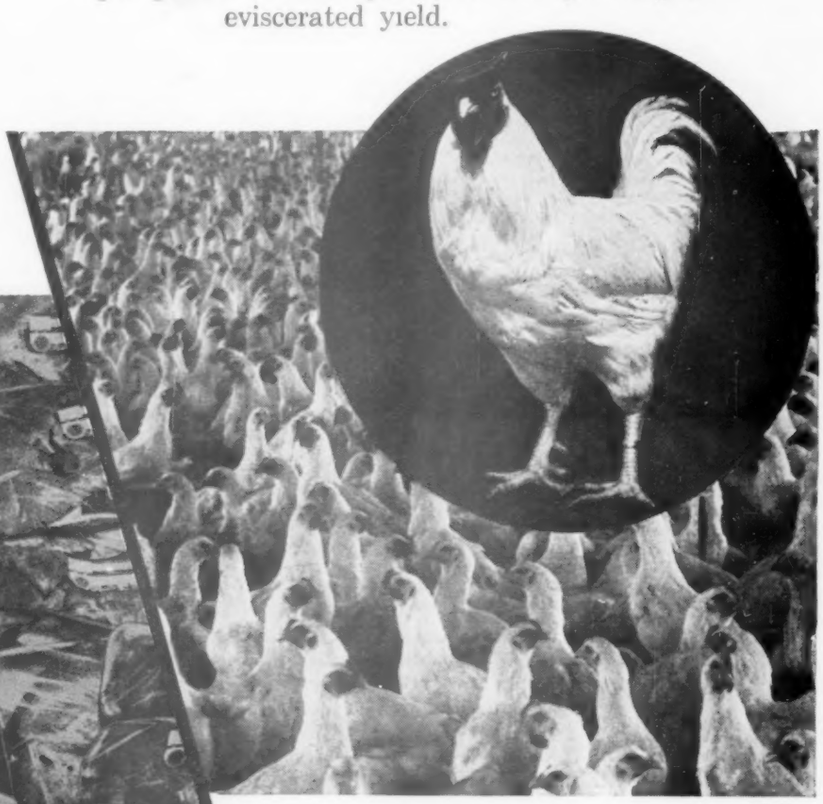

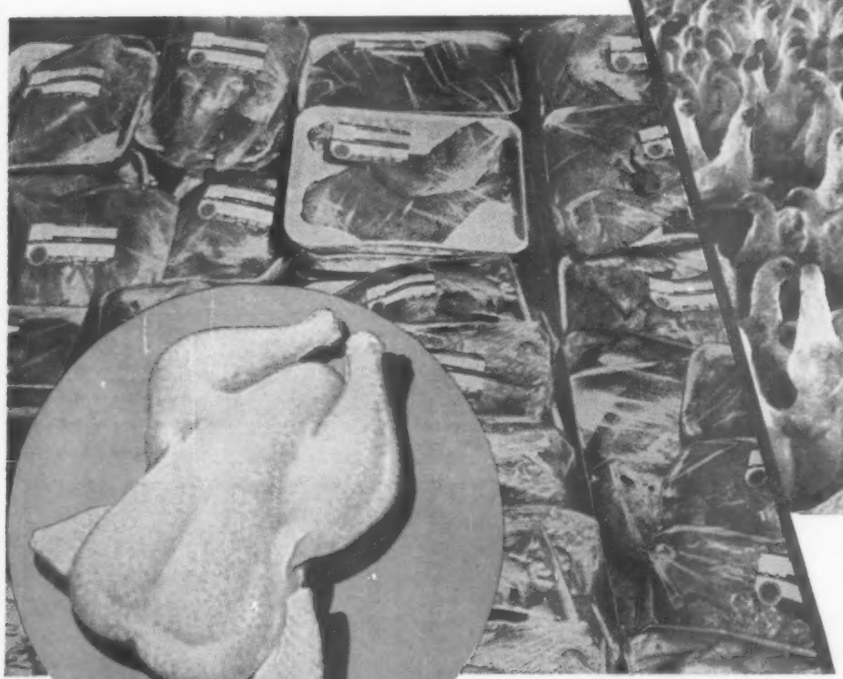

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Rewards Ahead for Feed Men Who Help Dairyman Become Professional Operator

By Dr. Gilbert H. Porter
The Beacon Milling Co.

The words "Industrial Revolution" ring clear to all. It has significantly altered our entire economy in the past 75 years. Agriculture is presently going through a revolution no less significant. Like its industrial counterpart, the Agricultural Revolution was inevitable and will run its full course.

As part of the Agricultural Revolution, an astonishing transformation has been going on in the dairy business. Nearly 40% of the U.S. dairy cattle population is now bred artificially. Average production per cow has moved from 5,000 pounds in 1947 to 7,000 pounds in 1960. The annual average percentage gain was zero in the 1930's, 1½% in the 1940's and almost 3% in the 1950's. The number of dairymen and farms have dropped sharply while cow numbers have dropped off gradually since 1944. It is reported that more than one half of the milk supply in federally regulated markets is now handled from bulk tanks. Capital investment in the dairy enterprise has rapidly moved up to a point that a capital investment per man today of $30,000 is commonplace. These are a few of the changes that have improved conditions for many while concurrently creating new problems that necessitate further adjustments.

The truly important factor that sifts out of the many profound changes taking place in the dairy industry today is this: **Only among the superior operators is dairying providing a satisfactory return on investment.** Closer margins per cow, combined with the marked increase in capital investment, have made it difficult for many dairymen to just stay in business—let alone make an adequate net income.

On the other hand, when we study the situation of the more successful dairymen we find such families living comfortably, with modern conveniences in the kitchen, barn and field. These folks set an outstanding example of "The American Way."

Why Are They Moving?

Why then are so many dairymen dispersing their herds and moving off the farm? Obviously there are many reasons. As we study this matter, one factor comes to the forefront as a point of great concern: A large number of dairymen are either not using

The OUTLOOK From the DAIRY Point of View

or are not effectively using tools now available to help increase the efficiency of the dairy enterprise. The 1960 national yearly per cow milk production average of 7,004 lb. is a bold indicator that our dairy industry has made only moderate progress in putting improved dairy cattle feeding and management practices into effective use.

A recent experiment station study of Dairy Herd Improvement Assn. records showed that 35 cows producing 12,000 lb. of 3.7% milk provided the same labor income as 88 cows producing 7,000 lb. of 3.7% milk. An interesting calculation based on these data shows that the 35 higher producing, more profitable cows would put 32% less milk on the market.

During the past 20 years the genetic producing capability of herd replacements has risen at a relatively rapid rate through the broad influence of the artificial breeding programs. It is the judgment of the author that improvement in the feeding and management of the lactating cow on the majority of our dairy farms has not kept pace with the rate of improvement in genetic potential. Therefore, with each passing year the differential grows wider between what the larger proportion of cows are producing and what they are capable of producing. It follows then that herein lies a golden opportunity for increasing net profits on many dairy farms. In a few words, it means using all the sound practices now available to enable each cow in the herd to economically express her inherited production capability. She must be provided with a favorable environment to do so. We as members of the feed industry have a "built-in" opportunity to help dairymen move closer to such an achievement in 1962.

NOW AND IN 1962—Before discussing such areas as higher level grain feeding, feed programming and using feed information on the farm, it should be helpful to look at a few dairy industry statistics compiled by the U.S. Department of Agriculture and presented in the November, 1961, issue of The Dairy Situation.

Milk Production to Reach a New Record High in 1962 — Milk Prices Trending Downward — Milk production has increased for two consecutive years and another significant increase, a new record, is in prospect for 1962. After declining from 1956 to 1959, milk production increased slightly in 1960 and is recording a larger gain this year.

The recovery is primarily due to a marked slow-down in the downtrend of milk cow numbers. After declining 5% in 1959, cow numbers dropped only 2% in 1960 and only about 1% this year.

Milk prices are now trending below one year ago. As 1961 progressed, increasing milk production together with some reduction in amounts used for fluid purposes partially counteracted the recent increases in the level of price supports. In September, for the first time in 1961, the price received by farmers for all wholesale milk — at $4.35 cwt. — dropped below one year ago. It is likely to remain below year ago levels through the first quarter of 1962. After March 31, the price of all milk will depend upon the level of price supports to be announced sometime prior to that date.

In addition, the price of dairy feed will probably move a little higher, reflecting recent increases in price supports for feed grains. The uptrend in feed prices may continue well through 1962. Milk-feed price relationships, though less favorable than in 1961, will remain relatively favorable in comparison with long-time averages. Beef prices are not expected to lend encouragement to heavier culling of milk cows.

Relatively Small Changes in Milk Production Obscure Dynamic Adjustments on Farms with Milk Cows—In 1959 total milk production was about the same as in 1954. Between these years, however, substantial adjustments occurred on farms with milk cows. The number of such farms decreased 39% while the average number of cows per farm increased 33% and the output per cow increased 20%. In the same period the number of commercial dairy farms decreased 22%.

Output per Cow May Continue to Expand Rapidly—Output per cow has increased nearly 30% since 1947. The three primary factors for bringing about this significant increase in per cow production performance are: (1) Improvements in the inherent productive capacity of dairy herds, (2) improved care combined with more liberal feeding and (3) more rigorous culling of low producers.

Some idea of the potential for fu-

Dr. Gilbert H. Porter

AUTHOR—Dr. Porter is director of dairy and livestock research for The Beacon Milling Co., Spencer Kellogg Division of Textron, Inc., Cayuga, N.Y. Since joining Beacon's staff in 1956, he has been closely associated with the development of Beacon dairy feed programming, high energy milking rations, veal production through the use of high milk solids milk replacer and the Beacon roughage analysis service.

He received his undergraduate training, with a major in dairy production, at the University of Massachusetts; his master's degree was awarded by the University of Connecticut, and he received his doctorate at Pennsylvania State University.

Dr. Porter's graduate training research was primarily in the field of roughage utilization by the lactating cow and the dairy calf.

TABLE 1. High Production and High Total Feed Costs Are Consistent with Maximum Returns

	Average Yearly Butterfat Production					
	304	351	398	445	496	541
Cost of roughage	$ 90	$ 95	$ 99	$104	$112	$109
Cost of grain	82	93	104	114	128	143
Return above feed cost	172	218	258	304	343	355

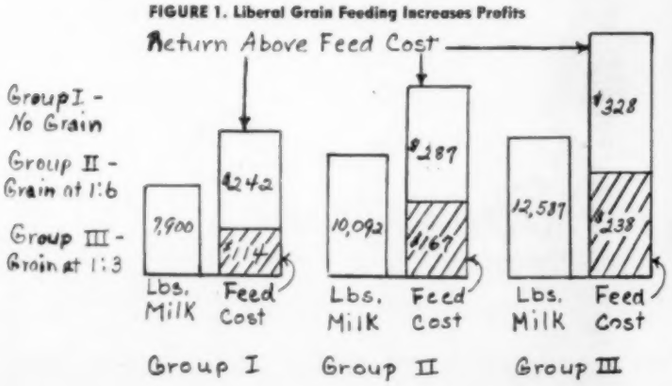
New York DHIC Yearbook, 1957.

TABLE 2—Feed Programming at Work for One Year

	2,365 Cows in 57 Herds	
	Pre-Program	First Year on Program
Average lb. milk	11,511	12,270
Average lb. fat	423	460
Average adj. income over feed cost*	$323.54	$341.35

*Same price per hundredweight of milk was used for the pre-program year and for the year on program to eliminate any bias due to milk price changes.

FIGURE 1. Liberal Grain Feeding Increases Profits



RESEARCH HERD—These cows are representative of those on feeding trials at The Beacon Milling Co.'s dairy research farm under the supervision of Dr. Gilbert H. Porter, author of this outlook article. Dr. Porter has been closely associated with the development of dairy feed programming, high energy milking rations, veal production experiments and roughage analysis.

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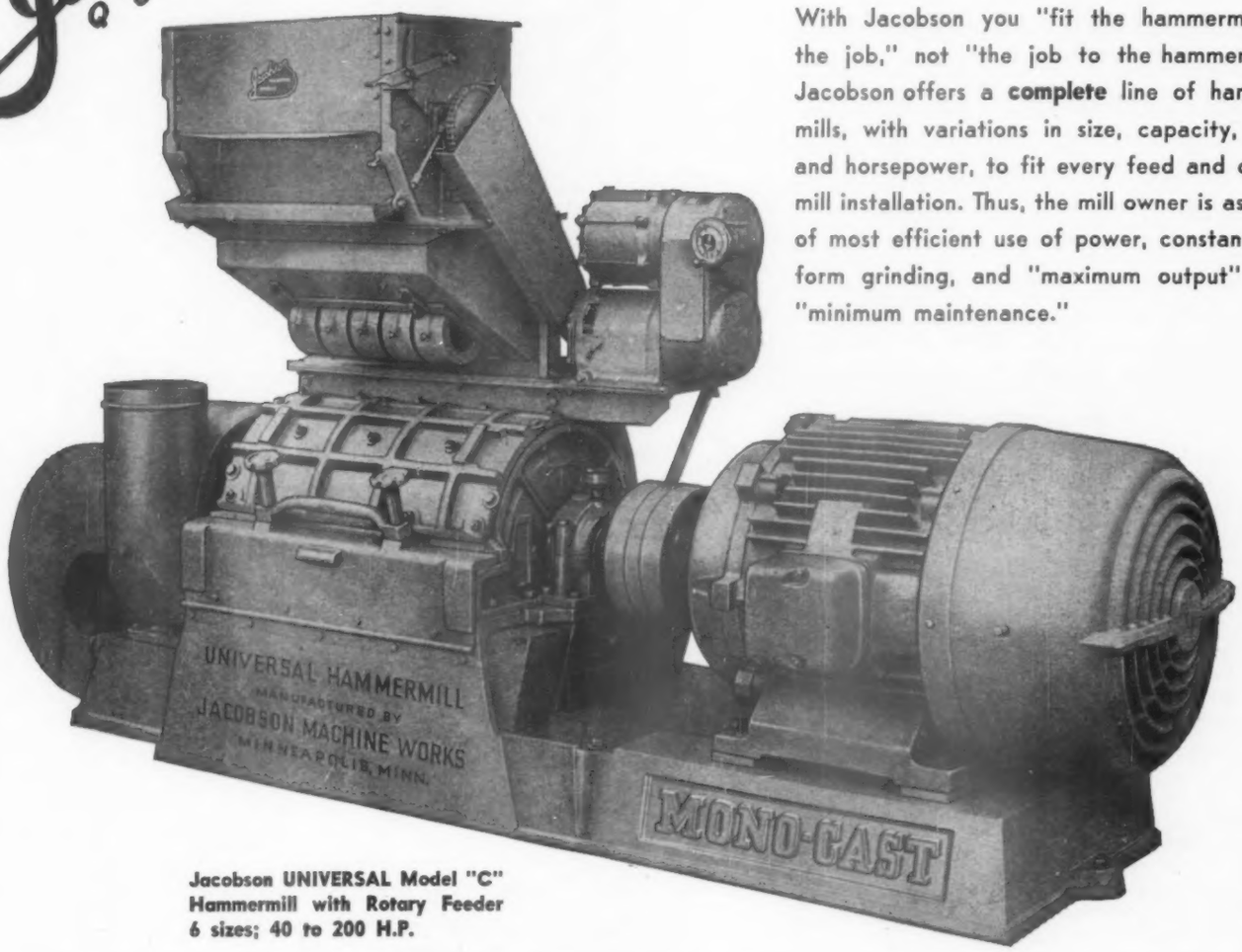

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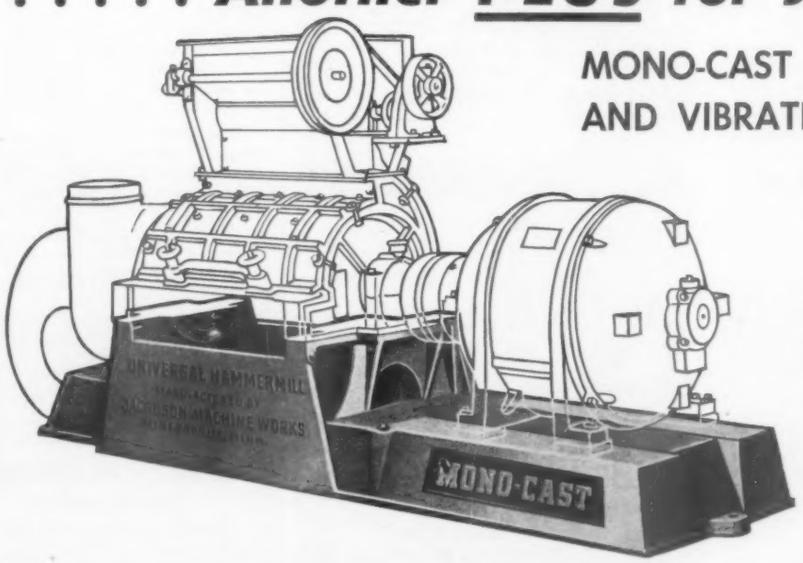

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TABLE 3. Feed Programming at Work for Two Consecutive Years

	1,350 Cows in 33 Herds		
	Pre-Program	First Year on Program	Second Year on Program
Average pounds milk	10,892	11,555	12,187
Average pounds fat	417	440	473
Average adj. income over feed cost*	$301.65	$316.06	$343.85

*Same procedure as described for Table 2.

ture gains in the productivity of milk cows is suggested by DHIA data. In DHIA herds the typical cow produced 11,000 lb. of milk in 1960 as compared with the average U.S. per cow output of 7,000.

Exodus from Dairying to Continue in the Next Decade—Along with generally declining cow numbers, many dairy farmers have enlarged the size of their operations in order to take better advantage of technological improvements and to gain access to better markets. The increased costs of production, need for larger capital investments coupled with narrowing profit margins have forced many dairymen out of business. This has resulted in substantially fewer but larger and more specialized dairy farms. Herd size data indicate that the greatest decline has occurred in farms with two to nine milk cows. The largest increase occurred in farms with herds containing 30 to 40 cows.

Unusually Sharp Decline in Use of Butter and Fluid Milk from Commercial Sources Aggravates Supply-Demand Balance—In 1961 commercial demand for dairy products dropped sharply as less butter and fluid milk were used than in the three previous years. This downward trend is likely to be arrested in 1962. Use of products which are heavy carriers of solids-not-fat, such as cottage cheese and nonfat dry milk, has risen rapidly over the past decade.

With a substantial increase in milk production in prospect next year, and with little change expected in aggregate civilian consumption from commercial sources, larger quantities of dairy products could be offered to the CCC for price support in 1962 than a year earlier. Milk prices will tend to soften in 1962 in the face of heavy government purchases.

SHIFT FROM BUTTERFAT AS PRICING BASE—Though it will have little effect on milk prices in 1962, we will focus more attention on developing new milk pricing formulas. These will take into account the solids-not-fat and/or protein content of the milk along with the percentage butterfat. A topic generating considerable interest in California at this time is the new 2% fat, 10% solids milk. A law has been passed to make such a product legal and it will probably appear on the market around the first of the year. A new concept of pricing will be established presumably based on solids and fat. Such a procedure raises many profound questions yet to be answered. California has made a pioneering step. Others will be making similar probes.

CURB ON DAIRY-PRODUCT OUTPUT?—It is reported that Secretary of Agriculture Freeman believes we must develop a "managed abundance" program for dairy products. Such thinking in the USDA, if implemented, could have some far reaching effects on the dairy industry.

Secretary Freeman has noted that the dairy-purchase program is the one agricultural support program that does not impose production controls. It is the opinion of the author that such controls would be as ineffectual as any instigated to date. The support level must recede. This will tend to further soften milk prices with a probable resultant decrease in the amounts of milk fat and non-fat milk solids available for government purchase.

Dairymen who take full advantage of technology now available will be able to make a satisfactory labor income on lower milk prices. The submarginal and marginal dairymen will continue to produce milk and widen the supply-demand gap as long as support prices remain at levels that encourage them to "hang on."

CONTINUED TIGHTENING OF COST-PRICE SQUEEZE CAUSING MORE DAIRYMEN TO BECOME RECEPTIVE TO CHANGE—One of the highest potential areas for increasing net profits on dairy farms is improving feeding procedures. Dairymen must do more than just get more digestible nutrients into their cows to enable each cow to express her inherited producing capacity. It must be done in a scientific manner utilizing all the sound dairy husbandry knowledge and tools available.

Dairymen are feeding more grain—and justifiably so. The amount of grain fed per cow in the U.S. increased from 1,456 lb. in 1944 to 2,333 lb. in 1960. This has increased the feed bill and therefore makes it increasingly important that the greatest return be realized for each dollar invested in purchased grain. Herein lies a real challenge in 1962 for every company in the feed industry producing and marketing dairy rations. What can we do to help dairy customers become more profitable operators? To help answer that question the author will draw on procedures being used by the Beacon Milling Co.

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ments of each cow in the herd each day of the year. It is our aim to feed and handle cows in a manner that will enable the truly capable cows to express their urge to milk. On any dairy farm they are the "mortgage lifters."

Why should we be concerned about these high capability cows? It is because they are the cows that, following underfeeding, respond to high level grain feeding with increases of two to four pounds of milk for every pound of additional grain fed.

With the national milk-feed price ratio presently averaging close to 1.45 lb., such production responses are conducive to sharp increases in returns over feed costs. The data in Table 1 are also helpful when discussing with dairymen the economic importance of handling their herd in a manner that will result in significantly higher levels of production.

Research work conducted at the New Jersey Experiment Station further substantiates findings that it costs dearly to underfeed high capability cows. Results of this study involving 18 Holstein and 6 Guernsey cows during a two-year trial are presented in Figure 1.

DAIRY FEED PROGRAMMING—Back in 1956 we became convinced that feeding programs based on grain to milk ratios and arbitrary upper grain feeding limits were not giving our higher producing cows an opportunity to produce up to inherited capacity. In early 1957 the Beacon dairy research department developed a specific feeding program that did away with grain to milk ratios and arbitrary upper grain feeding limits. Instead, the new program was based on Morrison's feeding standard and took into account five roughage quality levels. This program is now called "Dairy Feed Programming." In a few words, it involves the following:

1. A roughage analysis service.
2. Use of roughage analysis data to select proper grain protein level.
3. Use of roughage analysis results and monthly herd production credits to determine the daily grain intake for each cow to balance her nutrient needs.
4. Use of fresh cow feeding guides which move high capability cows onto full feed within two weeks following freshening.
5. Stresses proper dry cow feeding.
6. Involves use of specialty feeds such as a sodium propionate feed to help prevent and control ketosis. A high level vitamin D program is available to help prevent milk fever.
7. A Beacon "advisor" works closely with each programmed herd. He gets together with the feeder at least once each month to adjust grain feeding levels and to discuss the performance of each cow.

Sales Potential

When sales-service men have available such a specific tool as is represented by the feed programming package, they are in a sound position to give feeders a very effective feeding and management assist. It is Beacon's experience that "customer longevity" is markedly increased when feeders are programming. We are further convinced it helps increase dairy tonnage. In the 1958-61 period during which we have been offering the service of feed programming, our percentage dairy tonnage increase is threefold higher than for the 1955-58 period.

Working for Feeders

To help provide an answer to the question of how dairy feed programming is performing on the farm, we have recently completed a summary based on 57 herds on DHIA that have been fed and handled under the guidance of Beacon advisors using the feed programming tool. Many herds not on an official testing program are also being programmed. We have found the data summarized here most encouraging from a company viewpoint and are thoroughly convinced it has helped assure feeders they are on sound ground. We believe it is a very useful tool in gaining new feeders. (See Table 2.)

The truly important statistic in these data is the real increase in income over feed cost. It should be noted that in the pre-program year these cows were already performing appreciably above the average level of DHIA herds. And yet they registered a truly significant per-cow increase of $17.81 in income over feed cost.

We have two consecutive years' data now available on 1,350 of the 2,365 cows. The remaining cows did not start on programming soon enough to be included in a two-year summary. We believe the two consecutive years' data to be especially meaningful.

Here we draw your attention to a pleasing increase in income over feed cost for the first year on program of $14.41. The dramatic increase in the second year of programming over the pre-program year of $42.40 for each of 1,350 cows truly provides food for thought. This is the kind of help dairymen need. If you are not now providing a service of this nature, we recommend that you give it careful consideration in 1962.

TRENDS AND ASPECTS—As we prepare to move into 1962, feed men serving dairymen need to be cognizant of, and ever evaluating, the following trends and aspects of the feed industry-dairy enterprise complex:

Technical Feeding and Management Service—Herein lies a profound challenge and fruitful opportunity. A large majority of dairymen need such assistance and are becoming increasingly receptive because of continued cost-price pressure. Such service requires capable, well trained sales-service representatives.

Higher Levels of Grain Feeding—This trend will come into its own in 1962. It will increase tonnage potential with a static milk cow population. It will also bring a few problems. Dairymen must learn to feed grain at higher levels. It will create some grain bills that will be hard to justify if more attention is not paid to getting the additional grain into the right cows at the proper time.

Pelleted Dairy Rations, More Dairymen Seeking Bulk Service—It is not unusual today to learn of feed

(Turn to page 24)

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Where is the gun aimed in . . .

the Biggest Turkey Shoot in History

The turkey industry has taken a beating. It has rarely happened before. This is the reason the word "controls" has a strange, alien sound to the grower, the breeder flock owner or the hatcheryman, whether he is pro, con, or simply bewildered. Support for "supply management" comes chiefly from those who feel that something must be done, and that nothing else is in sight.

The opposition is not as easy to classify. There are plenty of objectors on the basis of principle alone. Among them are individuals who know they would profit mightily if marketing orders were approved.

There are those who are convinced that regulation would be slow death to the turkey industry unless competitive industries were also slowed down by regulation.

The F. M. Stamper Company, which is sponsoring this statement, opposes controls. It opposes the particular controls now being considered because it believes they would injure those they were intended to help. But it urges you not to accept a second-hand opinion from any source, including this one. There are questions to be asked. Ask them. Then decide whether marketing orders are good or bad for *you*.

A new medicine with an old label?

Marketing orders exist under a basic law of 1937 permitting control of the *flow* of a freely-produced commodity. The same law specifically prohibits limitations on production. Yet, by invoking a marketing order on hatching eggs, the Secretary of Agriculture could limit the production of turkeys — something which the same law says he *cannot* do.

Did Congress slip a cog? Turkey hatching eggs are not produced to be eaten. They are just one of the components that goes into producing a market turkey, along with feed, medication, labor and facilities. If Congress knew it was voting back door control of turkey production, why does it not trim down the mountainous production of corn by a marketing order on hybrid seed corn? Is there a difference? The handful of seed corn producers — those eligible to vote — might well oblige because price ceilings don't go along with marketing orders.

Who votes on what?

The Turkey Hatching Egg Marketing Order would permit regulation of the hatch by one of three methods. The Secretary of Agriculture would select the method to be used and determine the desirable level of turkey production "on the basis of (industry) board or committee recommendations, *or other available information.*" This quotation is from both orders. Remember it. Industry recommends, but the Secretary decides.

Who votes on the Hatching Egg Order? About 2800 breeder flock owners. Hatcherymen (there are about 600) may vote if they have a "proprietary interest" in egg production. This is the group whose vote will determine whether turkey production is to be regulated. The 16,000 growers (those who produce 400 or more turkeys annually) cannot vote in the Hatching Egg Referendum. Under Marketing Order legislation, only the "producer of the commodity" may vote. The "commodity" in this case is hatching eggs.

But the grower has not been forgotten He may vote in a separate referendum on the Market Turkey Order. This is a "window dressing order" to let the grower feel that part of the decision is his. If the hatch is controlled, a Market Turkey Order would be excess baggage. If the hatch is not controlled, a Market Turkey Order would almost certainly not be used, because it is too clumsy a tool by itself. But the grower votes on it. He should understand it.

Let's do some guessing

If the crop is controlled, what size will it be?

Nobody knows, of course; but there can't be much mystery about it. These two decisions must be made by those doing the controlling and made in this order:

1. What is a fair price for live turkeys? For the three years, 1958, 1959 and 1960, the live turkey price averaged nationally 24.4¢ per pound. In those years, there was no regulation and little complaint. So the Secretary might well determine that the 1962 crop should be regulated with the objective of accomplishing an average live price of 25¢.

2. What size crop would accomplish this? For the same three years, 1958, 1959, and 1960, turkey production averaged 83 million head. So, the Secretary might well determine that, because of population increase, an 86 million head crop would likely result in a 25¢ live price. This would be a 20% cutback from the 106 million head of 1961.

If you don't like these figures, substitute your own. But let's assume, in order to analyze further, that industry generally interprets the figures this way. A 25¢ market is in prospect.

How would a 25¢ market sound, Mr. Grower?

Let's assume you are a grower, marketing bronze at 20 lbs. average for hens and toms. You would expect to gross:

20 lbs. × 25¢ per lb. = $5.00 per head

Let's also assume that these are your expected costs. If you don't like them, substitute your own:

	PER HEAD
Poult Cost	$ .80
Feed and other direct costs 14¢ per lb. × 20 lbs.	2.80
Cost before labor and facilities	$3.60

So, you anticipate a return of:

	PER HEAD
Gross market value	$5.00
Cost before labor and facilities	3.60
Return for labor and facilities	$1.40

You might like to grow, for example, the 5000 turkeys you grew in 1961. But your hatcheryman hasn't as many poults to sell as he had in 1961. The hatch nationally is being reduced 20%, let's say. Your hatcheryman might be reduced more or less than that, depending on the control method used. But if his cutback is average, you expect to settle for 4000 poults. However, your hatcheryman, a perfectly honorable and ethical man, is feeling some peculiar pressures, and sees his competitors reacting to them.

Mr. Grower, *where are your poults?*

Has your hatcheryman put them out to contract growers?

He knows as well as you do that 80¢ poults are expected to return the grower $1.40 after direct costs. So he contracts the job for 50¢. A contract grower won't be hard to find after a 20% cutback. Isn't the hatcheryman 90¢ better off than if he had sold the poult for 80¢? Isn't that poult worth $1.70 to the hatcheryman? Would you honestly have done any differently?

Has your hatcheryman sold out—incubators, allocation and all?

There won't be a lack of buyers. If your hatcheryman has incorporated his business, control of the hatchery may be sold without the Secretary's approval. Feed manufacturers and food processors can see plainly enough that ownership of a hatchery and its allocation is the key to a highly profitable integration. But maybe the new owner will talk to you about a 50¢ contract unless another orphaned grower gets there first with a 35¢ offer.

Or has your hatcheryman simply followed the poult market?

Some grower whose source of 80¢ poults has disappeared is going to decide that poults at $1.30 are better than none at all. Even at a 50¢ premium on poults, he is still left a profitable return of 90¢ after direct costs — better than a 35¢ growing contract. Poult prices will level off at the point where some growers, at least, decide they're better off sitting it out for a season.

What about the market turkey order, Mr. Grower?

This is the one *you* may vote on. If the Secretary determines that turkeys are in surplus, he orders that part of each grower's output be "set-aside" or swept under the rug until a better day. They are still *your* turkeys, mortgaged or not. It is still *your money,* not the government's; *your risk,* not the government's. But they are out of your control. Wishing will not make them vanish. Where will they go? The order proposes four outlets:

1. Export. Not subsidized export like cotton or wheat. Wouldn't we have to tap markets we aren't tapping at current prices?
2. To an agency of the U. S. Government. Why doesn't the agency buy them now without a marketing order?
3. Into "Substantially Non-Competitive-Outlets." Can you name one?
4. Back into normal outlets. At what price?

Can you think of anyone foolish enough to store turkeys if set-aside turkeys can be fed back into the domestic market without a price floor? The proceeds, due you when set-aside turkeys are "disposed of," will be based on the price they bring after deduction of costs for processing, storing and disposition.

How will your order affect you, Mr. Egg Producer?

It depends upon which of three methods are used. Let's look at them.

Method No. 1

The number of eggs to be received or set by the individual hatchery would be established by the Secretary. It would be based on a percentage of the hatchery's operations for some year or years, and would almost certainly exclude 1961 from the base. So all hatcheries would not be cut the same proportion from their 1961 hatch. But, let's say your hatcheryman's allocation is equivalent to a 20% reduction from 1961. Will he cut all of his egg producers by 20%? Not necessarily. Maybe one of his flock owners who sold 20,000 eggs at 28¢ in 1961 would rather sell 20,000 in 1962 at 26¢ than 16,000 at 28¢. Or maybe the hatcheryman operates breeder flocks of his own for part of his needs and sees no sense in cutting them back at all. Would you? So, when he prorates the rest of his allocation, yours is 50% of 1961, unless you're ready to talk price.

Method No. 2

The hatch would be regulated by limiting both the number of eggs the flock owner could sell and the number of eggs the hatchery could receive. This is not considered workable and many who favor controls believe it should be omitted from a referendum, if there is one. Weather and other factors that influence egg production are not predictable and it would be impossible to balance the permissible supply of eggs with the permissible demand. At any given time, either the flock owner would be producing more eggs than he could legally sell, or the hatcheryman would have access to fewer eggs than he could legally acquire.

Method No. 3

The Secretary would order hatcheries not to set a certain percentage of eggs received from each breeder flock owner. From USDA comments, this seems to be the most probable method of control. It also appears the most hazardous. If Method No. 3 is used, Mr. Egg Producer, some unknown percentage of your egg production will be diverted to egg breakers and will be worth about 10% of its value as hatching eggs. Whose loss is this — yours or your hatcheryman's? How can he agree to assume the loss if he cannot tell how large it might be?

***Remember,* Mr. Grower** **THE SECRETARY CANNOT COMPEL YOUR HATCHERY TO SELL YOU ONE POULT AT LAST YEAR'S PRICE OR ANY OTHER PRICE.**

***Remember,* Mr. Egg Producer** **THE SECRETARY CANNOT COMPEL YOUR HATCHERY TO BUY ONE EGG FROM YOU AT LAST YEAR'S PRICE OR ANY OTHER PRICE.**

These things are built into the orders and cannot be written out by any amount of revision, amendment or patchwork. You may be told vaguely that things cannot work this way because of the "Unfair Trade Practices" section. Don't believe it. Prices of poults and eggs could be controlled only under specific authority from Congress. Congress has granted no such authority.

Any marketing order, no matter how written, would confer more power on the hatchery industry than the wise hatcheryman wants. He does not want the power to destroy the livelihood of another man to his own gain even when he has no intention of abusing that power. He does not want to see the foundations of the industry which his leadership created dissolve as the natural allies of years are turned into bitter adversaries.

A CHECK LIST BEFORE YOU VOTE

for the Turkey Grower

Under a hatching egg order:

	YES	NO
Assuming your hatcheryman is permitted in 1962 to set 80% of the eggs he set in 1961, will he guarantee to furnish you 80% as many poults as you bought in 1961?	☐	☐
Will he guarantee a poult price no higher than 1961?	☐	☐
Will he guarantee **any** poult price?	☐	☐
Will he guarantee you your pro rata share of his hatch for 1963?	☐	☐
Will he guarantee you your pro rata share of his hatch for 1970?	☐	☐
Will he assure you that he will retain control of his business?	☐	☐

for the Hatching Egg Producer

Under a hatching egg order:

IF METHOD 1 IS USED

	YES	NO
Assuming your hatcheryman is permitted in 1962 to set 80% of the eggs he set in 1961, will he guarantee you a market for 80% of the eggs you sold him in 1961?	☐	☐
Will he guarantee you last year's price or higher?	☐	☐
Will he assure you that he will retain control of his business?	☐	☐

IF METHOD 3 IS USED

	YES	NO
Will he guarantee you full hatching egg price for your eggs which he is required **not** to set?	☐	☐
Will he assure you that he will retain control of his business?	☐	☐

By all means, Mr. Grower, vote. It is true that the hatching egg producer and the hatcheryman will make the real decision in a referendum you weren't invited to. But a strong grower protest against controls, registered in the grower's own referendum would be a hard political fact . . . hard for any Secretary of Agriculture to ignore.

This statement has been prepared and the space bought by a company engaged in feed manufacturing, turkey processing, and, principally, the production of frozen prepared foods. It is being done because this company does not wish to be forced into somebody else's business, and because it believes these orders are just plain bad.

F. M. STAMPER COMPANY
ST. LOUIS, MISSOURI

LEARNING SESSION—Sales representatives of W. M. Gillies, Inc., Palo Alto, Cal., West Coast representatives for Distillation Products Industries, a division of Eastman Kodak Co., Rochester, N.Y., are pictured during a visit to DPI in Rochester. The representatives learned about applications of DPI products and their use in poultry and livestock feeds, including pet foods and dairy and beef cattle feeds. Wallace Quick, assistant sales manager for DPI, is shown pouring out a sample of feed supplement. Looking on, left to right, are John Blanchard, Los Angeles; John Kluga, Palo Alto; W. M. Gillies, Jr., Los Angeles, and Robert Myer, Portland. A portion of their week-long visit was spent studying feed grade fat-soluble vitamins A and E and supplements containing vitamins A, D and E.

manufacturers who are moving at least 50% of their dairy tonnage in the form of pellets. Larger dairy farms establishing bulk handling facilities and, in some instances, setting up milking parlors, have provided more fuel for this active trend. It will accelerate in 1962.

Higher Available Energy, More Completely Fortified Feeds—As we start restricting roughage, which is voluntarily accomplished when cows are provided with more grain, the nutritional balance of the ration will have to receive more attention. As an example, is adequate high quality protein produced in the rumen when cows are consuming less than 15 to 20 lb. of hay or its equivalent? What about vitamin A supplementation as we study the new knowledge being accumulated in beef cattle nutrition? These and other nutritional factors such as B-complex vitamins will need our careful attention.

More Dry Lot Feeding—A trend long established on the West Coast will become more pronounced near other high density population areas, and will increase opportunities for the feed industry to provide a larger proportion of nutrients. We are seeing an inceasing number of these operations in the Northeast with every pound of hay and grain being purchased.

CITATION—Emory Cocke, left, president of Suni-Citrus Products Co., Haines City, Fla., is shown accepting a special citation from C. C. Murray, dean, college of agriculture, University of Georgia, Athens, in recognition of Mr. Cocke's contribution to the dairy industry through pioneering in the manufacture of citrus pulp. The award was presented at a Dairy Science Club banquet in Athens. The citation states: "His courage and determination resulted in the production of this valuable dairy cattle feed from what was once waste products of the citrus industry."

More Dairymen Must Production-Test Their Herds—As of Jan. 1, 1961, only 14.8% of the cows and heifers two years old and over kept for milk in the U.S. were enrolled in the various programs of DHI. This statistic can only mean that nearly 85% of the dairy cows in the U.S. are being managed on the basis of "guesstimation." Dairymen who will continue in business and enjoy increasing success in 1962 and in future years will become record conscious. They will seek the products and services of specialists. Greater emphasis will be placed on efficiency of performance with fewer inputs evaluated on the basis of unit cost.

Dairy production is becoming more specialized at an increasing rate. The profit gap will widen also at an increasing rate between the skillfully managed dairy enterprise and the unit where the owner is keeping cows rather than the cows keeping the owner. The year 1962 will be a highly significant year for dairymen who take positive steps toward becoming professional operators. Likewise, it will be a most rewarding year for feed industry men who place greater emphasis on helping dairymen take such steps.

"Sales Increased – Net Profit Greater Due to Efficiency of BLEND-O-MIXER," says Clarence Niemeyer.

✻ *Crown Point, Indiana*

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Manufacturers of
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Phone Lowell 9445
MAIN OFFICE
Indiana Ave. at Erie Railroad
CROWN POINT, INDIANA
Phone 1042

April 28, 1961

Continental Sales Company
Nevada
Iowa

Attn: Mr. Oliver Haley, Pres.

Dear Mr. Haley:

This writer feels he owes you a devoted "THANKS" for your contribution in the Blending industry by developing your BLEND-O-MIXER and then marketing it last year.

Already I wish I'd ordered a larger BLEND-O-MIXER PLANT than my 20-foot tall blue. But it's alright. I merely have to fill them more often and be real sharp in ordering my next carloads of materials. Besides, I think I'll branch out with another Blend-O-Mixer Plant this Fall.

I've been blending for a number of years and have experienced labor problems and maintenance of much equipment. Now, I'm branched out from my old plant with your BLEND-O-MIXER PLANT 18 miles south, and I'm doing it all with the same labor payroll as before.

My volume of sales has automatically increased because I can serve a larger area with almost any blend in a minute's notice. And my margin of Net Profit is greater through the high efficiency of your BLEND-O-MIXER program.

If anyone has skeptisms about your program, just have them call, write, or see me. Today, instead of my worrying about my competition, I'm letting them worry about me.....

Don't get me wrong—there is maintenance expense and adjustments in any business—but you have certainly programmed it to a minimum in the Blending Business—thanks again——

Very truly yours,
Clarence Niemeyer
Clarence Niemeyer, President

NIEMEYER'S DIRECTION FARMERS FERTILIZER

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Profit $10 A TON
OR MORE! OWN YOUR OWN
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One man operated Push Button Blending Method Delivers 20 Tons Per Hour! Automatically Mixes any one of 7,000 possible formulas.

✻ One Of 54 Blend-O-Mixer Plant Installations In 11 States - Completed To Date

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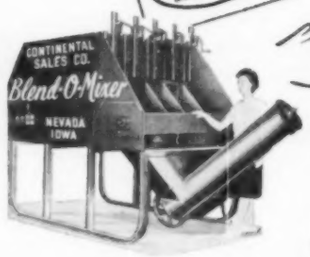
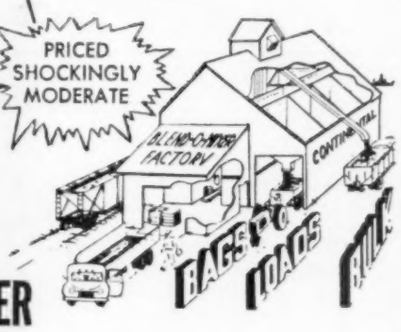


PUSH BUTTON BLEND-O-MIXER



SOLVES PROBLEMS . . such as – slow Step-By-Step mixing, shrinkage, inaccuracy, labor, high maintenance and inadequate storage losses, inefficiencies and high investment! Own your own Blend-O-Mixer Plant or add to your existing plant.

Buy all – or any part of it – or rent the BLEND-O-MIXER. Extended payments can be arranged.

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Please send me brochure and more information about the Continental Blend-O-Mixer.

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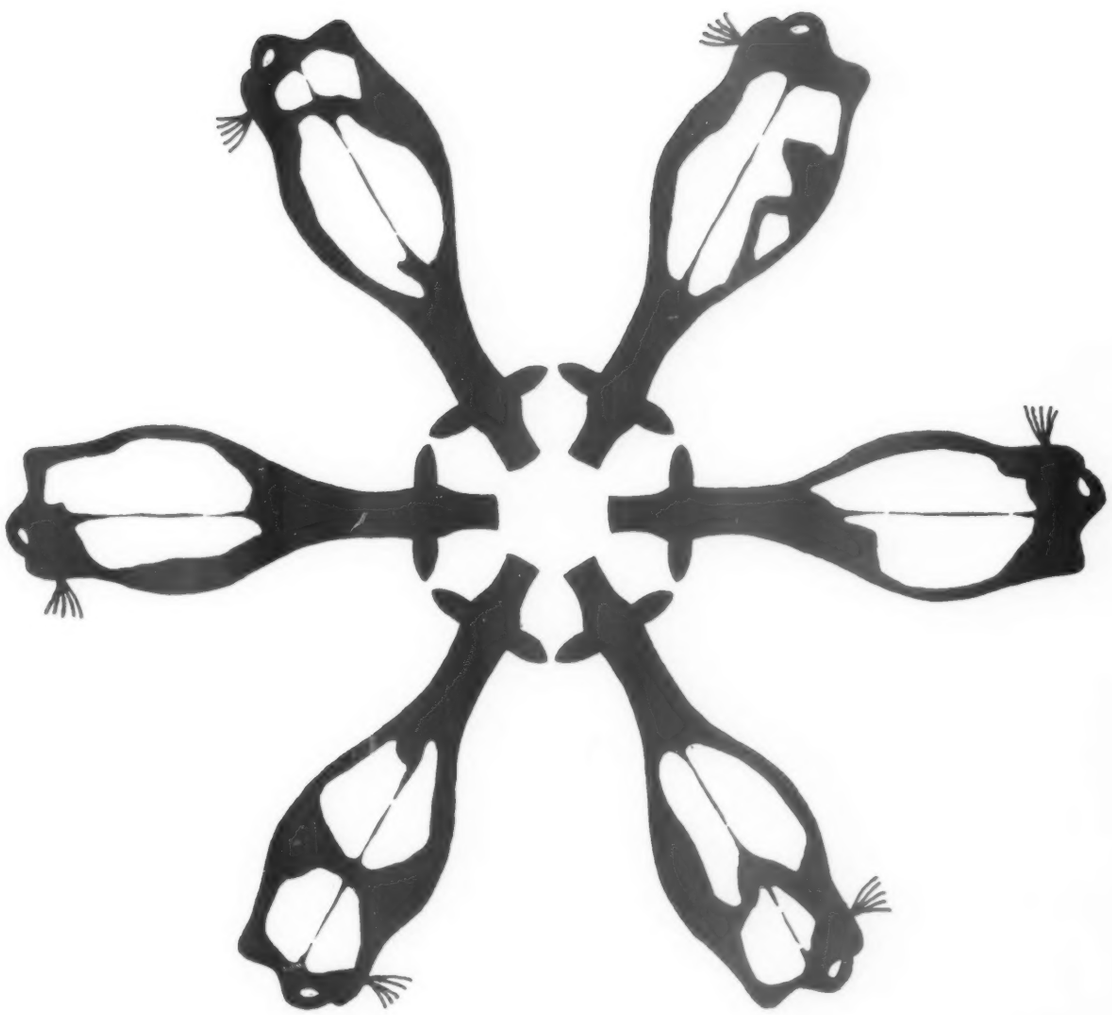
Season's Greetings



American Cyanamid Company, Agricultural Division, Princeton, New Jersey CYANAMID

Feed Service BULLETIN BOARD

IDEAS TO HELP YOUR CUSTOMERS

Milking for Fun?

Is there money in milking?

A cow producing 216 lb. of butterfat or less doesn't return her owner a single cent for taking care of her, says Ralph W. Wayne, extension dairyman at the University of Minnesota. He indicates that the average cow in Minnesota produces 281 lb. of fat and returns 47¢ per hour for labor and that the average Dairy Herd Improvement Assn. cow produces 406 lb. of fat and returns her owner $1.33 per hour for labor.

◆

Brucellosis Control

Calfhood vaccination is an important step toward control and eradication of the costly disease of brucellosis, says Dr. Charles B. Plummer, Jr., veterinarian with the Florida Agricultural Extension Service.

Dr. Plummer advises:

Vaccinate beef calves between four and eight months of age and dairy calves when they are six to eight months old.

Do not vaccinate calves after they are nine months old.

Do not vaccinate beef calves before they are four months old or dairy animals less than six months of age.

Calves born in April should be vaccinated no later than December.

◆

On Feeding Moldy Corn

Certain molds in corn contain estrogenic-like hormone material which interferes with the normal reproductive cycle of bred sows.

Therefore, D. C. Younkin, assistant professor of animal husbandry, University of Pennsylvania, warns against feeding moldy corn to bred sows since it may cause the sows to abort their pigs or farrow weak or dead pigs.

He continued, stating that moldy corn can be fed to growing and finishing hogs if it is fed free choice and if there is other good corn available. "This permits the hogs to eat as much of the moldy corn as they want," said Mr. Younkin. He commented that the reason for this is that certain molds in corn are toxic to pigs and if they have a choice, they will not generally eat enough of the moldy corn to hurt them.

◆

Broiler Feeder Costs

Such things as the types of feeders used by broiler growers, the original cost and labor costs involved come in for considerable study in a time of low broiler prices like those just experienced.

A North Carolina State College study shows the costs of three types of broiler feeders range as follows: Trough, $0.0032 per broiler; tube, $0.0039, and mechanical, $0.0054 to $0.0090 per broiler. The amount of time required to feed broilers was found to vary as follows:

Type of Feeder	6,000 birds	12,000 birds
Trough	.570 min.	.568 min.
Tube	.282 min.	.271 min.
Mechanical .	.130 min.	.106 min.

The study now indicates that the value assigned to labor becomes the important factor in deciding which type of feeder to buy.

It is pointed out that at a wage rate of 60¢ per hour a tube-type feeder would be least expensive up to about 11,000 birds in one house, but for houses larger than 11,000 a mechanical feeder would be cheaper. However, the report continues, if labor were three times as high ($1.80 per hour), hanging feeders would be cheapest with less than 4,500 birds and mechanical feeders cheapest in the larger houses.

◆

Slatted Flooring

Slatted flooring for livestock shelters, originated in Iceland 200 years ago and first adopted by poultrymen, is taking hold among hog producers, reports the University of Illinois.

The university points out that with slatted floors manure drops through slots in the raised floor and can be removed without interference from animals or equipment. The floors have the added advantage of keeping animals clean.

A recent University of Illinois agricultural engineering research indicates that concrete slats may be the farmer's best bet for raised slatted flooring for hogs. Early this year Illinois researchers compared quarry screen flooring and concrete and wood slats.

In general, they found that quarry screen did the best job of keeping hogs clean. However, animals on the wire screen were reluctant to move around and showed some hoof wear.

Concrete and wood slats had no visible effects on the animals' hooves. And, researchers noted little difference between wood and concrete so far as self-cleaning was concerned.

However, the scientists point out that in choosing slatted floor material the farmers should also consider such factors as durability, anchorage, dimensional stability and cost. When these factors are considered, concrete appears to have a slight advantage over wood for flooring, they say.

The Illinois researchers point out, however, that work is under way with wood slats for flooring. Results of these tests could affect the present advantages noted for concrete, they commented.

Feeding Values of 1954-1960 Corn Found to Be Equal

WOOSTER, OHIO—Shelled corn grown in 1954 and stored under the federal government loan program was found equal in feeding value to 1960 corn in a cattle feeding experiment completed recently at the Ohio Agricultural Experiment Station here.

The results obtained showed no significant difference in feeding value between the shelled corn of two ages with respect to average daily gains, feed requirements per unit of gain, carcass grades and dressing percentages. Moreover, both kinds of corn gave about the same results in daily gain and carcass grades when supplemented with vitamin A.

The Ohio test, the researchers pointed out, supplies a provisional answer to livestock producers who have wondered about the feeding value of the millions of bushels of corn held in storage for several years by the Commodity Credit Corp. and now being offered for sale at market prices under the 1961 Feed Grain program.

The test was begun at Wooster July 18 with 40 head of yearling steers on dry lot and was concluded Oct. 10. One-half of the steers were fed on 1954 corn; the other half were fed on 1960 corn. Both lots of 20 head each were further subdivided with one-half in each case receiving no vitamin A supplement while the other half got 20,000 International Units of supplemental vitamin A per head daily.

The corn was ground in a hammer mill and samples of ground corn passed through standard mesh screens showed no difference between the 1954 and 1960 corn in fineness of grind. Corn was hand full-fed with good quality mixed hay, soybean oil meal, salt and minerals.

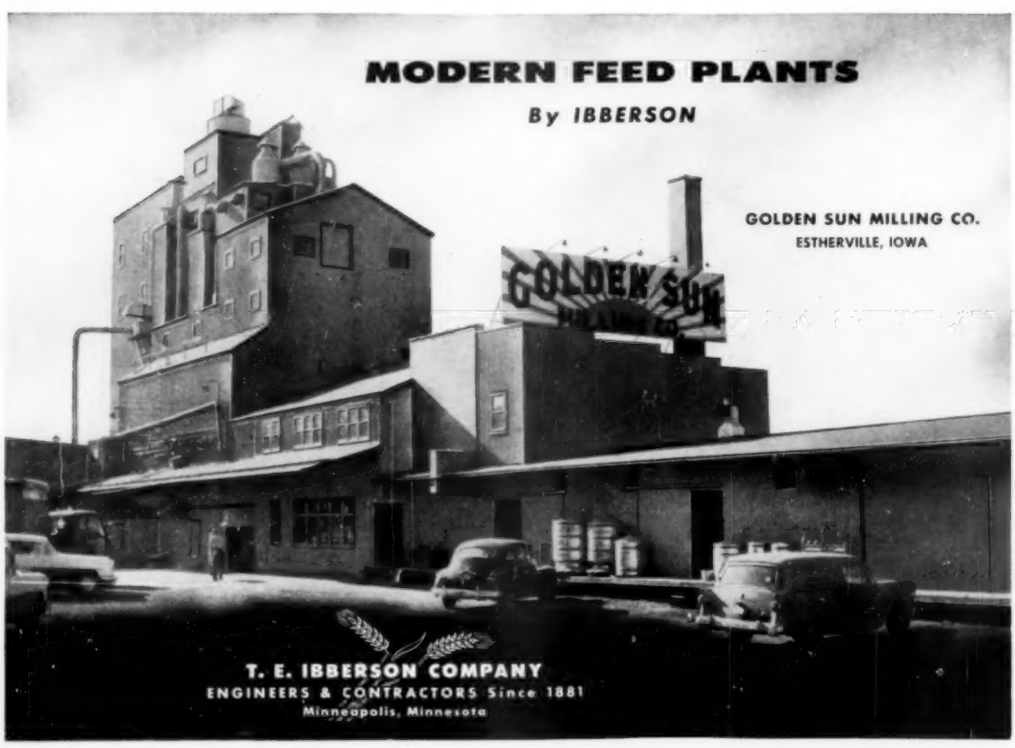
Blood plasma vitamin A levels were determined at the beginning and end of experiment. Although the feeding of vitamin A brought about a definite increase in blood plasma level, none of the steers were considered to be deficient in this vitamin.

This one short term experiment with only two lots of corn does not answer the question of feeding value for all stored corn nor does it answer the question for other classes of livestock, the Ohio researchers said. However, it does show no deterioration in feeding value for fattening cattle on shelled corn which had been in storage for nearly seven years, they commented.

Poultry Club to Meet

ATLANTA—The Poultry Industry Sales Club, an organization of members of the allied trades organized in 1958, is being reactivated and will hold an organizational meeting during the Southeastern Poultry Show in Atlanta in January, according to Chuck Edwards, secretary.

The meeting will be in the Dinkler Plaza Hotel Jan. 28 at 1 p.m. Val William, president of Marco Corp., a sales promotion organization, will be the principal speaker. Walt Davis, Bio-Lab Co., Decatur, Ga., is president of the organization.



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New Laboratory Methods Increase Efficiency of CCC Trace Mineral Premixes

Research has proved that the efficiency of trace mineral premixes is dependent on many factors—a fact that has made necessary the development of new laboratory tests and testing methods. The use of these new methods in producing CCC Trace Mineral Premixes is helping feed manufacturers make better feeds.

Users of CCC Trace Mineral Premixes have positive assurance that the correct amount of each trace mineral is present in a form that is biologically available, that each is compatible with one another, and that the premix flows freely and mixes readily in all types of feeds.

This assurance is treble safe-guarded by CCC. Each trace mineral compound is carefully analysed before using to determine its chemical analysis and physical properties. Each trace mineral premix is carefully analysed to make sure it meets the minimum guarantees for each trace mineral element. A sample of each trace mineral premix batch is retained for making later analyses should the need to do so arise.

Illustrated is a newly developed technique for determining iodine in trace mineral premixes at the CCC Laboratory

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The

OUTLOOK

From the

BROILER

Point of View

The Market's What You Make It; Want an Endless Broiler Bust?

By Dr. John C. Hammond

O. A. Newton & Son Co., Bridgeville, Del.

Troubled times are not new to the poultry industry and come as a shock only to those new to the industry. If we are to predict where we are headed we must, like a man rowing a boat, look back to see how we got where we are. Then use the best available information to set our future course. So let us look.

Back in 1855, after the Cochin China bubble burst, George P. Burnham dedicated his book "The History of Hen Fever" to the successful and unfortunate dealers throughout the U.S. and the victims of misplaced confidence in the hen trade generally. In its final pages he philosophied, "They recklessly invested their twenties, or fifties, or hundreds, and in some instances their thousands of dollars in this hum (bug), without any knowledge of the business, and without any consideration whatever, except the single aim to keep the bubble floating aloft until they could realize anticipated fortunes. . . . But the cars have gone by, and they may now wait for another train. Perhaps it will come! Poor fellows! Poor, deluded, crazy, reckless dupes! You have had your fun, many of you, and now you will have the opportunity to reflect over the ruins that are piled up around you."

In 1943 our colleagues at the Beltsville Research Center were justly amazed that we would desert a scientific career to gamble on the broiler business, for it was a bubble due to burst as soon as the war was over.

Plea for Action

In early 1950 at a Northeastern Poultry Producers Council outlook conference we pleaded for five actions that would help prevent disastrously low markets that periodically threatened to bankrupt most of us in the broiler business. They were that: (1) Hatcheries set eggs only on signed orders, (2) hatchery supply flocks be financially encouraged to control the supply of hatching eggs so that they would more nearly coincide with the future demand for broilers, (3) broiler growers be educated to judge the future demand for any given flock and make their own independent decision as to when to order chicks, (4) that we try to develop an "intention to place broiler chicks six weeks hence" statistic for their guidance and (5) resort to our own ingenuity to solve our problems rather than running to Washington for help.

AUTHOR—Since 1943, following 12 years of poultry research at the U.S. Department of Agriculture's Beltsville Research Center, Dr. Hammond has been with O. A. Newton & Son Co., a Bridgeville, Del., feed manufacturing company that has been an integrated broiler producer for more than 25 years. He is vice president and treasurer of the company.

Dr. Hammond, reared on a general farm in Rhode Island, is a graduate of the University of Rhode Island and George Washington University. He obtained his Ph.D. at the University of Maryland.

His interest in the welfare and progress of the poultry and feed industries has won him important organization posts. He is a past chairman of the American Feed Manufacturers Assn. Nutrition Council and the American Farm Bureau Federation National Poultry Commodity Committee. Presently he is chairman of the Delaware State Poultry Commission and a member of AFMA's board of directors.

John C. Hammond

In 1952 at the Ohio Broiler School we pleaded for sound financing as a means of preventing the ruination of the broiler industry. Guarantees to the grower had recently begun their 10-year over-rapid growth stimulation. Our advice to those risking their money on broilers was the same then as now: (1) The more financial incentive a man has, the better job he will try to do; (2) the closer this man is to his chickens, the better the job he will do, and (3) the more he knows of husbandry, the more effective his efforts will be.

These factors are given equal weight with characters, assets, suitability of facilities and ability to pay in event of a complete loss. We then set forth all of the costs in the production of broilers including many inescapable ones that are still blithely ignored in most reported total costs. We feel most strongly that most of the over-production is caused by people who lack the records to show the complete cost of broiler production. This, unfortunately, is true not only of growers new to the business but also of sales managers of some of the best feed manufacturers.

Recently our own board of directors demanded an analysis of our prospects in the broiler business in the coming winter and a justification for the continued risk of the stockholders' capital in such an unpromising enterprise.

We have discussed our analysis with the principals of other ably managed broiler enterprises in Delmarva and find that all of us with adequate records agree rather closely. We have obtained our board's permission to share this analysis with you as a service to the industry.

The analysis is based on the expected costs for the months of December of 1961 and January, February and March of 1962. The average feed ingredient cost including antibiotic and coccidiostats was predicted to be $65 per ton. Hatching egg cost was set at 7.1¢ per chick. Fuel cost was based on average mid-winter experience of $37.90 per thousand broilers. Fixed and variable costs for the feed and hatchery departments were separated into operating, selling and administrative costs based on the past 11 months of operation.

Input costs per thousand broilers started at four levels of production are listed in Table 1. Not included in the table are those costs that would continue even if the feed and hatchery departments were closed down and all houses permitted to stand idle. These costs include depreciation, insurance, taxes, repairs on a non-operating basis, etc.

Optimum Level of Production

The question then arose for us, and for you, at what level of production would we lose the least money per month in view of the rather dismal market outlook for the next six months? Again certain assumptions were made: (1) At these input costs and the winter threat of respiratory diseases a 3.4 average live weight at sale would be the least cost and (2) by eliminating the poorest 10% of the growers and placing the remainder on a no-guarantee incentive contract, feed conversion would be reduced from 2.5 to 2.3 lb. of feed per pound of meat.

Some of the factors affecting profit or loss per thousand broilers or per month at four levels of production are listed in Table 2.

In the approach to the solution of our problem, equations were derived that would express the various economic factors as linear functions of

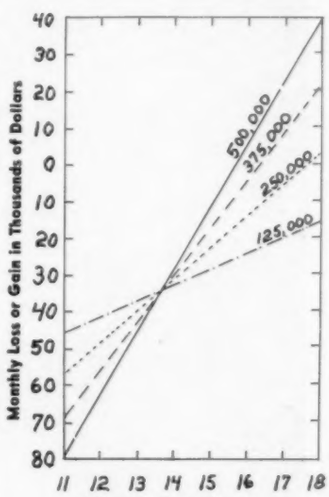


FIGURE 1—This drawing illustrates the financial effect of the sale price and the number of broilers sold per month under these conditions: Average weight of broilers, 3.4 lb.; feed per pound of meat, 2.3 lb.; feed ingredient cost, $65 ton; hatching egg cost, 7.1¢ per chick, and other costs as indicated in Table 1.

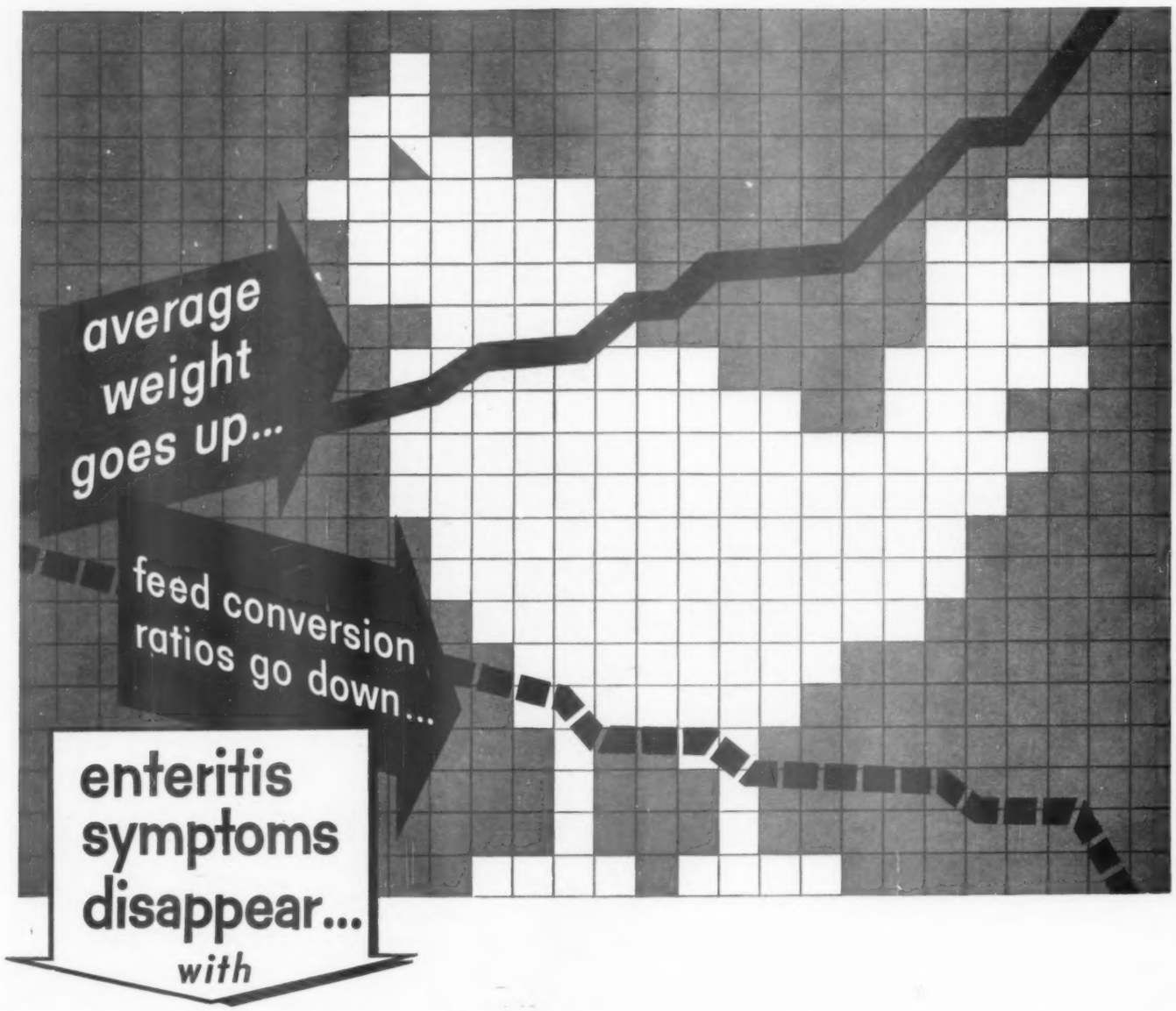
TABLE 1. Costs per 1,000 Broilers Sold at 3.4 lb. and 2.5 Conversion

Number started per month	125,000	250,000	375,000	500,000
Feed ingredients	$276.25	$276.25	$276.25	$276.25
Egg cost	71.00	71.00	71.00	71.00
Fuel (winter)	37.90	37.90	37.90	37.90
Litter	8.00	8.00	8.00	8.00
Vac. and med.	10.20	10.20	10.20	10.20
Fixed expenses, feed	103.46	51.73	34.50	25.87
Fixed expenses, hatchery	50.51	25.26	16.84	12.63
Variable feed	6.59	6.59	6.59	6.59
Variable hatchery	4.04	4.04	4.04	4.04
Total ingredients	403.55	403.55	403.55	403.55
Total expenses	164.60	87.14	61.97	49.13
Total inventory	568.15	490.69	465.52	452.68
Labor at farm	50.00	50.00	50.00	50.00
Total inv. and labor	618.15	540.69	515.52	502.68
Fixed S & A	119.86	59.93	39.95	29.97
Variable S & A	10.33	10.33	10.33	10.33
Total variable costs	474.51	474.51	474.51	474.51
All fixed costs	273.83	136.44	91.29	68.47
Grand total	748.34	610.95	565.80	542.98

TABLE 2. Factors Affecting the Profit or Loss per 1,000 Broilers or per Month

Number of broilers	1,000	125,000	250,000	375,000	500,000
Chick cost, $0.01	$10.00	$1,250.00	$2,500	$3,750.00	$5,000
Feed cost, $0.10	$ 8.50	$1,062.50	$2,125	$3,187.50	$4,250
Fuel cost, $10.00	$10.00	$1,250.00	$2,500	$3,750.00	$5,000
Incentive, $0.001	$ 2.00	$ 250.00	$ 500	$ 750.00	$1,000
Sale price, $0.001	$ 3.40	$ 425.00	$ 850	$1,275.00	$1,700

AIR VIEW—Grain storage and warehouse facilities of O. A. Newton & Son Co., of which the author of this article is vice president and treasurer, are shown in this picture taken from an airplane. The Bridgeville, Del., firm has been an integrated broiler producer for more than 25 years.



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Broiler growers are discovering that non-specific infectious enteritis can be controlled more effectively, at lower cost, with FORTRACIN in their feed.

Tests prove that birds treated with FORTRACIN show enteritis virtually eliminated. Cost-per-pound of meat is *lower* than when standard medication is used.

One of the reasons for FORTRACIN's efficiency is its outstanding stability. It loses none of its potency in storage, and less than 4% under pelleting. You are certain of full bacitracin strength whenever you use FORTRACIN.

But the proof is in the feeding. So fortify your feed with FORTRACIN, and watch those birds grow! FORTRACIN is supplied in concentrations of 10, 25, 100 and 200-gram activity-per-pound, and in soluble form for drinking water. FORTRACIN-penicillin combinations are also available.

WRITE NOW FOR DATA AND PRICE SCHEDULES.

★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★

FORTRACIN is approved for use with Amprol® and Zoamix® coccidiostats.

* U.S. Patent No. 2,744,712
"Amprol" Reg. T.M. of Merck & Co., Inc., Rahway, N. J.
"Zoamix" Reg. T.M. of The Dow Chemical Company, Midland, Mich.

PENICK

Farm Chemical Division

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both price and monthly volume. This method simplifies both interpretation and recalculation with changed factors.

Figure 1 shows the effect of selling 125,000, 250,000, 375,000 and 500,000 broilers per month at prices ranging from 11 to 18¢ per pound when 3.4 lb. broilers used 2.3 lb. of feed per pound of meat and all other input costs are as set forth above.

This figure presents a summary of the whole situation. The slope lines indicate the loss or profit per month as affected by the number of broilers sold. The figures in the left margin include all costs. The intersection at 13.7¢ indicates that at this sale price all direct variable costs are met. If the sale price is above this figure the deficit of fixed costs will be reduced. If the sale price is less than 13.7¢ we would be better off closed down. At higher sale prices the more birds grown the more overhead will be reduced, conversely at lower prices the more birds grown the more the monthly potential loss will be increased. In short, the more birds there are to be sold the steeper the potential profit or loss slope on the figure.

Prediction Hazardous

Predicting the selling price in future months is too hazardous for us. There was a time when we could do it for the Delmarva area with considerable accuracy by basing it on change in price as influenced by the increase or decrease of the number of hatching eggs set 13 weeks before. Now surpluses from one area tend to flow into the normal markets of other areas and rapidly prices all over the country are depressed to the extent of any area's surplus. Frequently it appears that new production that causes a surplus in that area's markets is offered in the normal markets of several other areas before it is finally sold. This process creates price depressing effect several times that to be expected from the total surplus involved.

It is also common knowledge that the relationship between wholesale cost and the retail selling price of broilers varies greatly from time to time in a given store, chain or market depending on the merchandising strategy of the week. This cannot be predicted except that it will continue to happen. When it does the other buyers must try to drive the price down so that they can compete without loss. Thus the relationship between supply and price is less clearly defined than it used to be and seems to account for only about 70% of it.

On this basis, if the potential supply would indicate a 14¢ market for the four winter months, we would have to qualify it by saying plus or minus as much as 30% of it. In all probability the range will be between 11.9 and 16.1¢. That's a pretty poor statistic to gamble your company's capital on so we invite you to calculate your own predictions.

The supply still looks a little larger than last year's, at least for the next six months. There are slightly more pullets in hatchery flocks and hatchability is up slightly. The pork supply will be up a little, too. Poultry meat in storage is also up from last year. Of course, the population has increased, too, although many newcomers are not eating meat yet. We are exporting increasing quantities of broilers and that's a help. However, hatching eggs that were flowing through Canada to Cuba may be diverted to domestic incubators unless the Cubans ante up.

Scapegoats

Like a desperate small boy trying to alibi himself out of a justified whipping, we in the broiler industry have been seeking scapegoats on whom to blame our present squeeze.

Supermarket merchandising whimseys are viewed with justifiable alarm

KELLY DUPLEX

HAMMERMILLS

A complete line... to handle any grinding problem!

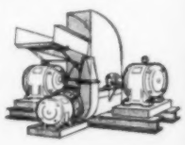
Whatever you may be looking for in a hammermill... you'll find the answer to your problem in the Kelly Duplex line.

There's a size, a type and a capacity to meet every need. Each machine is ruggedly constructed of extra heavy arc welded steel to assure low maintenance costs and long life . . . each gives you unsurpassed grinding efficiency and quick, easy screen change . . . and each is unconditionally guaranteed to grind more grain with the same power, conditions being equal, than any other hammermill on the market—or your money back.

We'll be glad to show you, through our free planning and layout service, how one of these machines can be "custom built" to give you maximum production at minimum cost. Mail the card today for literature and full details.

MULTI-MOTOR hammermills

All Kelly Duplex Hammermill models can also be furnished as either two-motor mills (one on blower and one on mill) or as three-motor mills (one on blower and two on mill).



These multi-motor hammermills let you regulate HP consumption to the job at hand, give you balanced power and "direct line" processing, reduce starting power requirements, and virtually eliminate downtime.

REMOTE SCREEN CHANGE HAMMERMILL MODEL D-20

20" throat. Furnished with motor on blower—and with either one or two motors on mill.

CLIP ALONG THIS LINE . . . FOLD OVER, FASTEN . . . AND MAIL TODAY!

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Permit No. 72
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VIA AIR MAIL

BUSINESS REPLY ENVELOPE
No postage necessary if mailed in the United States

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The Duplex Mill and Manufacturing Company
Springfield, Ohio

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The Duplex Mill & Mfg. Co.
Springfield, Ohio

Yes, I'm interested in KELLY DUPLEX machinery. Without obligation, please send me complete information on the items checked.

☐ **Information on free mill planning and layout service.**

☐ Hammermills
☐ Vertical Feed Mixer
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☐ Portable Screw Elevator
☐ Bucket Elevator
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☐ Pit Auger
☐ Electric Truck Hoist
☐ Corn Crusher-Regulator
☐ Corn Sheller with Blowers
☐ Regular Corn Sheller
☐ Pitless Corn Sheller
☐ Combined Sheller-Cleaner
☐ Gyrating Cleaner
☐ Corn Scalper
☐ Corn Cutter and Grader
☐ Cob Crusher
☐ Electric Bag Cleaner
☐ Forced Air Carloader
☐ Magnetic Separator
☐ Grain Feeder
☐ Grain Blower
☐ Complete Line Catalog

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TITLE _____

FIRM _____ PHONE _____

CITY _____ STATE _____

FEEDSTUFFS

SELLIN' SAM **By Jim Zilverberg**

"Oh, Oh. Looks like Sam's been making New Year's resolutions again!"

and holy indignation. Who begged them to feature broilers?

Hatcheries are accused of glutting the market with surplus chicks that get raised into surplus broilers. Who told them that if you expect to sell us chicks next spring, we want them every week when we order them?

The major feed manufacturers have been accused of trying to swallow up the industry. Are their boards of directors economic babes in the woods? Besides, who decided he could make his own feed cheaper now that his tonnage has built up?

Government Controls

There are those who don't seem to remember their history too well. They feel that the Great White Father should save them from the surplus so recently created. Just who was it that created this recent surplus? What concerns us even more is that so many of the Great White Father's new helpers evidence so little faith in the free enterprise system. In their zeal to bring us the blessings of controlled agriculture they seem to have missed two rather important points: (1) Five million farmers can and will outsmart any group of men in Washington; unless, as in some countries that already suffer from controlled agriculture, they are rounded up and shot, and (2) a lot of surplus broilers are now being produced with the misguided notion that the basis for a quota better be established before controls come.

It would be a distinct service to agriculture and an indication of statesmanship if all hands in the U.S. Department of Agriculture announced convincingly that no broilers grown after 1960 would be counted toward quotas or allotments should the industry surrender its management to the government. As a matter of moral principle, ask yourself why it would be any less reprehensible for us to conspire with Secretary Freeman to control the price of broilers than it was for certain electrical magnates to control the price of generators. As a matter of hard boiled economics, do you know of any government controls that increased efficiency and improved the lot of the consumer?

When our children came home from school with complaints of abuses, grievances and alibis, their mother happily told them with convincing finality, "Life is what you make it!" So in conclusion, may we suggest that you stand before a mirror and say to the image, "Friend, the market's what you make it!"

Feed Grains Acreage Increase in Canada Termed Necessary

OTTAWA—Some increase in feed grains acreage in Canada seems necessary to insure adequate domestic supplies during the crop year 1962-63, it was stated in the "Agricultural Outlook for Canada, 1962," at the recent Dominion-Provincial Agricultural Conference in Ottawa.

It was explained: Oat supplies will be at a low level toward the end of the 1961-62 marketing year, and barley exports will be reduced. Imports of corn during the current crop year will be much higher than usual, with practically all of this commodity moving in from the U.S. Limited quantities of oats are also entering Canada from the U.S. to augment domestic supplies of feed grains, mostly into Ontario and Quebec.

Feed grain prices, which rose considerably during 1961, are expected to remain higher than a year earlier, at least until the 1962 crop size becomes known, it was said. With higher feed grain prices and low reserves the conference was told that Canadian farmers will plant more oats and barley in 1962.

Outlooks for 1962 for various commodities were presented. Information included:

Hogs—It is expected hog marketings will continue higher during the first quarter of 1962 than a year earlier, and prices will likely drop below those in early 1961. However, from April until late summer, marketings and prices will be nearer 1961 levels, and it is likely that hog marketings will drop below year earlier levels by the fall of 1962.

Cattle—Heavy cattle export this year will cause a small reduction in 1962. Smaller supplies and higher prices of grains are likely to reduce the number of cattle on feed in western Canada. As a result, the supply of finished cattle is likely to decline in the first half of 1962. This will help to maintain cattle and beef prices in Canada near or above present levels.

Eggs—Indications are that egg production during the first half of 1962 will be greater than during the first half of 1961. If so, egg prices may be somewhat lower.

Broilers, Turkeys—Lower turkey prices, it is expected, will result in reduced output in 1962. Chicken-broiler production may decline in Ontario and Quebec, where prices have been lowest, but some expansion is expected in other regions.

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FREE-FLOWING, FEED-GRADE

NIACIN

Manufactured from our own synthetic raw materials

Reilly CHEMICALS

Thirteen plants to serve Industry

REILLY TAR & CHEMICAL CORP.

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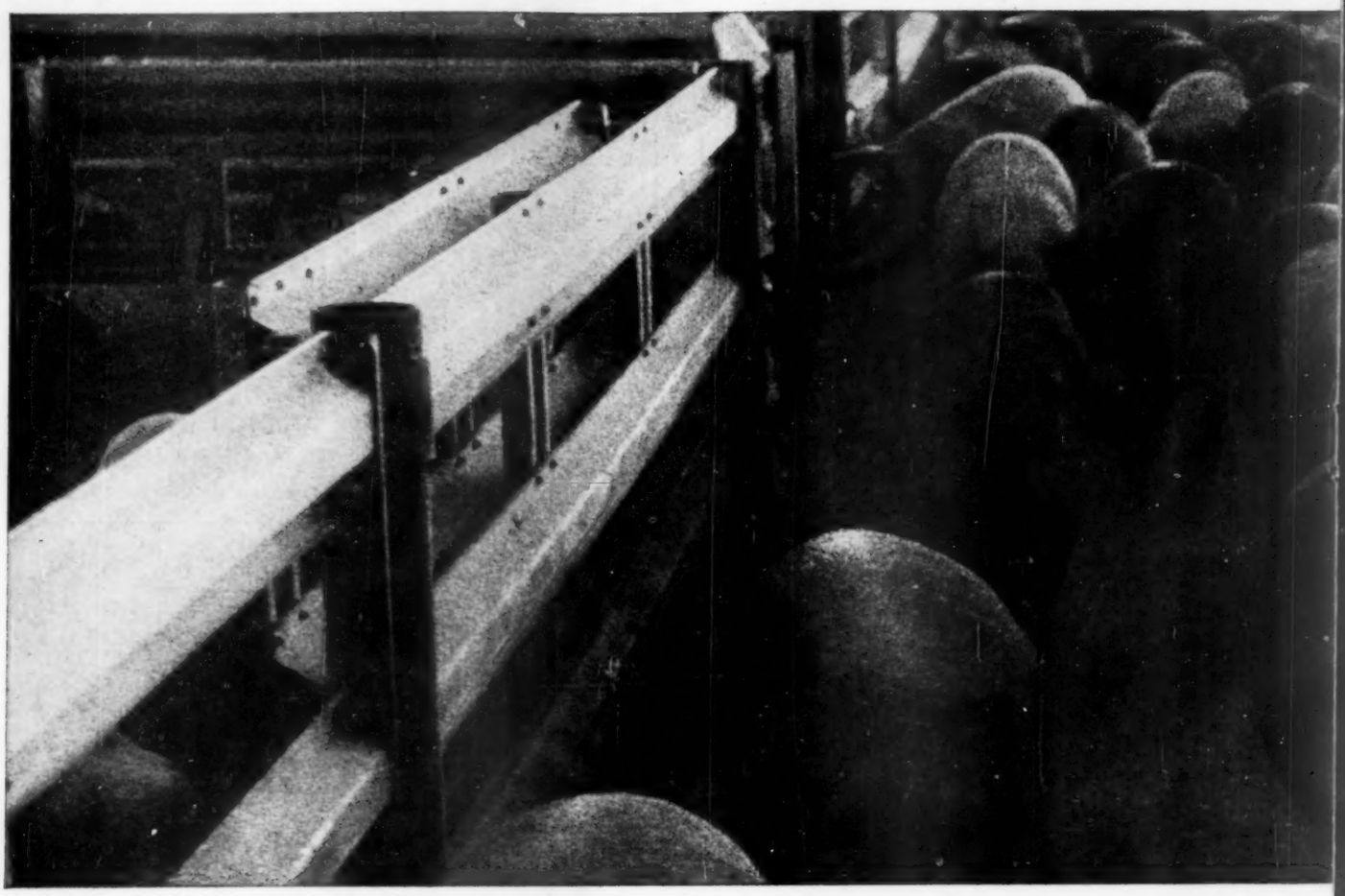
Don't miss out on this special Calf Manna-Suckle promotion! Thousands of dealers have already ordered their handsome Salad Set, display piece, and free mailing pieces.
THIS HAND-CARVED AFRICAN EBONY 5-PIECE SALAD SET $1.00
Get this display for your store
(shown ½ actual size)

Look for powerful advertising support in the January 10th issue of Hoard's Dairyman—4-page, 4-color insert on the complete Carnation-Albers Herd Replacement Program! Plus strong ads in 36 other farm publications nationally! Your customers will be asking about the Salad Set offer—and buying Albers Calf Manna, Suckle, Sho-Glo and Spur. Be ready for them!

This Offer Expires March 31, 1962.

Calf Manna Suckle Sho-Glo

A CARNATION-ALBERS DEALER PROMOTION



No matter what antibiotic switch to new

Hogs fed rations with Taomyxin averaged:

- **8 days less feeding time to market**
- **at $34.20 less cost per 100 hogs over other antibiotics tested**

Just by changing the antibiotic in your swine feeds to Taomyxin, you can help your customers save money consistently . . . more reason than ever for them to switch to your program.

Taomyxin has proved it can produce more gains at less cost than any other antibiotic used alone or any combination of antibiotics tested. Test averages show 8 days less feeding time and $34.20 less cost per 100 hogs.

Here's how much better Taomyxin proved out:

	More Gains from Taomyxin by:	Better Feed Efficiency from Taomyxin by:
Zinc Bacitracin	13.4%	7.3%
Bacitracin plus Penicillin	12.8%	5.7%
Penicillin plus Streptomycin	3.0%	3.4%
Penicillin plus Streptomycin plus Bacitracin	6.4%	1.6%
Chlortetracycline plus Penicillin plus Bacitracin	6.5%	1.2%

Testing by Pfizer, the feed industry, colleges, and on many hog farms has shown the recommended level of Taomyxin to be 2 grams of oleandomycin to 8 grams of oxytetracycline wherever increased performance is of prime importance.

During periods of high disease risk, the product of choice is still Terramycin** alone at high levels—it's the proven superior disease-fighting antibiotic.

Call your Pfizer representative for complete details on supplementing your rations with new Taomyxin.

Taomyxin requires a supplemental N. D. A. Have you filed yours? If not, do it now.

*Oleandomycin and oxytetracycline
**Brand of oxytetracycline—Reg. U. S. Pat. Off.

you're using, it will pay to Taomyxin*™...

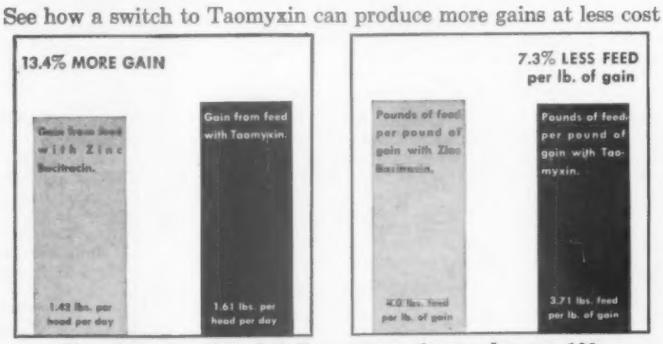
The following summary shows the average of test results comparing Taomyxin with antibiotics used alone or in combination:

	Control†	Taomyxin
GROWTH		
Number of trials	12	12
Number of pigs	694	669
Av. daily gain—lbs.	1.38	1.48
Increase over controls—%	—	7.25%
FEED EFFICIENCY		
Number of trials	12	12
Number of pigs	694	669
Lb. feed/lb. gain	3.70	3.62
Improvement	—	2.20%
ECONOMICS††		
Cost per cwt. gain	$11.951	$11.761
Savings per cwt. gain	—	.190
Savings per pig (180 lbs. gain)	—	.342
Savings per 100 pigs	—	$34.20

†Other antibiotics and combinations of antibiotics.
††Cost of antibiotic supplements included.

Using Zinc Bacitracin?

See how a switch to Taomyxin can produce more gains at less cost


13.4% MORE GAIN
Gain from feed with Zinc Bacitracin.
1.42 lbs. per head per day
Gain from feed with Taomyxin.
1.61 lbs. per head per day
7.3% LESS FEED per lb. of gain
Pounds of feed per pound of gain with Zinc Bacitracin.
4.0 lbs. feed per lb. of gain
Pounds of feed per pound of gain with Taomyxin.
3.71 lbs. feed per lb. of gain

Taomyxin produced 19 lbs. more gain per day per 100 pigs... on 29 lbs. less feed per 100 lbs. gain.

For this trial, a regular, high-quality swine feed was used. Taomyxin was added to part of the feed, zinc bacitracin to the rest ... and the performance of the different rations was compared.

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SOYBEAN OIL MEAL AND PEASIZE CAKE

43% PROTEIN — 4% FAT

The High-Fat, High-Protein, High-Energy Basic Ingredient for All Feeds and

DOG FOOD RATIONS

PREFERRED by Feed Manufacturers from Coast to Coast
AVAILABLE in carloads and trucklots throughout the year
from our centrally located plant

ILLINOIS SOY PRODUCTS COMPANY

SOYBEAN PROCESSORS

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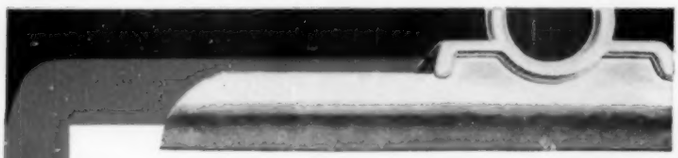
FRAME or FIREPROOF CONSTRUCTION

Talk to **HOGENSON** Construction Co.

712 FLOUR EXCHANGE MINNEAPOLIS 15, MINN

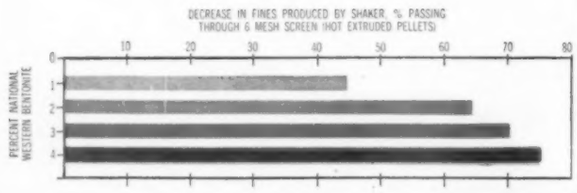


Poultry Ration Pelletizers

✓ *increase production*

✓ *reduce fines*

with Baroid's **NATIONAL*** *Western Bentonite*



Baroid Chemicals' Feed Research Program has found that the use of NATIONAL Western Bentonite in poultry feed pellet formulas increases production while reducing "fines."

The use of Baroid's NATIONAL Western permits considerable latitude in the choice of production rate improvement and/or pellet quality. A concentration of about 2% NATIONAL Bentonite gives the best combination of advantages. This amount improves pellet production 65% and decreases the fines from hot extruded pellets 55%.

When the mill is operating at maximum or constant feed rate, the addition of NATIONAL Western produces harder pellets—and far fewer fines—with less power consumption. Note on the chart shown here the drastic decrease in fines achieved by varying percentages of NATIONAL Western Bentonite in the feed formula.

More detailed information on the use of Baroid's NATIONAL Western Bentonite in poultry feed pellets can be obtained by mailing the coupon below.

BAROID CHEMICALS, INC.

BAROID

A SUBSIDIARY OF NATIONAL LEAD COMPANY

1809 SOUTH COAST BUILDING, HOUSTON 2, TEXAS

*Registered Trademark, National Lead Company

#166

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A SUBSIDIARY OF NATIONAL LEAD COMPANY
1809 SOUTH COAST BUILDING HOUSTON 2, TEXAS

Please send me Data Sheet on the use of NATIONAL Western Bentonite in poultry feed pellets.

NAME .....

COMPANY ..... TITLE .....

ADDRESS .....

CITY ..... STATE .....

Convention Calendar

New Listings

For the convenience of readers who scan the Convention Calendar regularly for new listings, those added to the column in the current week appear separately from ones which have been entered previously. The following week they will be moved to their proper slot where they will remain until the event is held.

Jan. 12—Georgia Poultry Federation; Dixie Hunt Hotel, Gainesville, Ga.; Max F. Ward, pres., Box 493, Gainesville.

Jan. 24—New Jersey Feed Industry Assn.; Stacy-Trent Hotel, Trenton, N.J.; pres., Irv Lintner, P.O. Box 88, Somerville, N.J.

Feb. 8—Sheep-Lamb Feeders Day; University of Minnesota, West Central School and Experiment Station, Morris, Minn.; H. E. Hanke, Animal Husbandry Dept., Morris.

Jan. 4-5—Minnesota Poultry Hatchery Assn.; Radisson Hotel, Minneapolis, Minn.; sec., L. L. Baumgartner, Litchfield, Minn.

Jan. 8-9 — Kansas Formula Feed Conference; Kansas State University, Manhattan; chm., Prof. T. B. Avery, Poultry Science Dept., West Waters Hall.

Jan. 9-11—National Turkey Federation; Memorial Auditorium, Dallas, Texas; co-headquarters hotels, Baker and Adolphus; sec., M. C. Small, Box 69, Mount Morris, Ill.

Jan. 16—Missouri Turkey Day; University of Missouri, Columbia; sec., Missouri Poultry Improvement Assn., E. M. Funk, Box 568, Columbia.

Jan. 19-20—Florida State Poultry Producers Assn.; San Juan Hotel, Orlando; sec., Tom Chesnutt, P.O. Box 11236, St. Petersburg 33, Fla.

Jan. 21-23—Indiana Grain & Feed Dealers Assn.; Claypool Hotel, Indianapolis; sec., Fred K. Sale, 600 Board of Trade Bldg., Indianapolis 4.

Jan. 21-24—Farmers Grain Dealers Association of North Dakota; Civic Memorial Auditorium, Fargo; sec., Lloyd C. Hanson, 513 Black Bldg., Fargo.

Jan. 22—Nevada Feed Confeernce; University of Nevada, Reno.

Jan. 23-27—New Jersey Farmers Week and Farm Show (Jan. 23-25); Trenton Armory; sec., Phillip Alampi, New Jersey Department of Agriculture, Trenton 25.

Jan. 26—California Swine Day; Hunt Hall Auditorium, University of California, Davis; Dr. Hubert Heitman, Jr., Animal Husbandry Dept.

Jan. 26—California Dairy Cattle Day; Horticulture Auditorium, University of California, Davis; Robert D. Appleman, Agricultural Extension Service.

Jan. 28-30—Midwest Feed Manufacturers Assn.; Shamrock-Hilton Hotel, Houston, Texas; exec. vice pres., Lloyd Larson, 20 W. 9th St. Bldg., Kansas City, Mo.

Jan. 29-31 — Southeastern Poultry & Egg Assn.; Merchandise Mart, Atlanta, Ga.; sec., Robert H. Martin, 235 E. Ponce de Leon Ave., Decatur, Ga.

Jan. 30-31—Illinois Agricultural Industries Forum; University of Illinois, Urbana, Ill.

Jan. 31—Louisiana Livestock Producers Day; Louisiana State University, Baton Rouge 3; chm., Dr. A. M. Mullins, Animal Industry Dept.

Jan. 31—Beef Cattle Study Day; Agricultural Experiment Station, University of Arkansas, Fayetteville; Dr. E. M. Cralley, station director.

Jan. 31-Feb. 1 — Illinois Nutrition Conference; University of Illinois, Urbana; chm., Dr. Carl L. Davis, Dairy Science Dept.

Jan. 31 - Feb. 1 — New Hampshire Poultry Health Conference; University of New Hampshire, Durham; Richard Warren, Poultry Science Dept.

Feb. 1—Boston Grain & Flour Exchange Annual Banquet; Parker House, Boston; tickets, Raymond C. Hall, H. K. Webster Company, 177 Milk Street, Boston, Mass.

Feb. 1-2—Oregon Animal Industry Conference; Oregon State University, Corvallis, Ore.; co-sponsored by the Oregon Feed & Seed Dealers Assn. and Oregon State University; chm., Bill Eggimann, Dairy Cooperative Assn., 2613 S.E. 8th Ave., Portland.

Feb. 2-3—Minnesota Turkey Growers Assn.; Leamington Hotel, Minneapolis; sec., Roy C. Munson, 2200 University Ave., St. Paul 14, Minn.

Feb. 4-6—Wyoming Grain, Feed & Seed Dealers Assn.; Townsend Hotel, Casper, Wyo.; sec., Everett L. Berry, Box 118, Sheridan, Wyo.

Feb. 5-7—Association of Southern Agricultural Workers; Jacksonville, Fla.

Feb. 6-7 — Hoosier Turkey Trot; Memorial Union, Indiana University, Bloomington; Turkey Dept., Indiana State Poultry Assn., Inc., Poultry Science Bldg., Purdue University, Lafayette, Ind.

Feb. 7-9 — American Dehydrators

(Turn to CALENDAR, page 62)

CALENDAR FOR 1961-62

DECEMBER

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In all weather...in flock after flock

ALREADY OVER A BILLION BIRDS

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The OUTLOOK From the BEEF Point of View

Beef Industry Will Provide Opportunity, If Feed Man Can 'Roll With the Punches'

By E. F. Dickey
Honeggers' & Co., Inc., Fairbury, Ill.

Breeding, feeding, management and marketing trends in the beef cattle industry are undergoing as much of a revolution as is occurring in other phases of animal and poultry production.

There are several dominant factors in the production of beef and the marketing of the end product. One of the most significant of these, I suppose, is that we still require too much concentrated feeds per pound of beef meat produced in order to compete price-wise with other meat products. While much nutritional progress has been made in beef cattle feeding, we still require from 7 to 12 lb. of feed to produce a pound of finished beef, depending upon the weight of the animal and the degree of finish to which the beef animal is fed. This, of course, compares with some 3½ lb. of feed to produce a pound of pork; slightly over 2 lb. of feed to produce a pound of broiler meat, and slightly over 3½ lb. of feed to produce a pound of turkey.

It has been said, "It is the eye of the master that fattens the calf." Unfortunately, too many of the cattlemen from the old school still take great pride in fattening large cattle to prime weights, simply because this is the kind that they want to feed. It becomes more of an art, or a hobby, with them rather than a commercial enterprise. They take great pride in the fine, beautiful, fat animals they produce.

Rapidly Changing Market

This type of feeding requires a concentrated ration of yellow corn, a good protein supplement and choice minerals. While the finished animal is beautiful to behold, unfortunately the cost of the finish is far above the selling price. The reason: A rapidly changing market. As the mass of people earn more money they are willing to buy more beef, but they are willing to settle for cheaper cuts. Consequently, the prime animal no longer brings the premium price it once did.

E. F. Dickey

AUTHOR—Since 1958, Mr. Dickey has been president of Honeggers' & Co., Inc., a feed manufacturing and farm supply concern headquartered at Fairbury, Ill. His first position with the company, which he joined in 1949, was general sales manager. Before being named president he also served Honeggers' as vice president, general manager and executive vice president.

After obtaining his law degree from the University of Indiana in 1931 and until he became executive secretary of the Illinois Feed Assn. in 1946, Mr. Dickey's career experience included sales promotion, advertising and administration. Also during this time he was a feed and grain broker and a captain in the army.

Mr. Dickey is a director of the American Feed Manufacturers Assn.

MORE FEED MEN FEEDING?—The large investment in cattle required and the relatively small amount of supplemental feeds normally sold by the feed man in fitting beef animals for today's mass market are among the reasons why the author of this article believes feed manufacturers will be deterred from immediately expanding to any great extent in beef cattle feeding on an integrated basis.

We presume that many midwestern feeders will continue to finish out prime cattle on corn raised on the feeder's farm. Our presumption would be that this class of feeder will continue to supply an abundant amount of prime beef at a loss to the feeder. He is no doubt influenced by past practices and the fact that he has a crib full of corn.

The more practical feeder who, for the most part, feeds large numbers of cattle, oftentimes on a commercial basis, is producing a different type of finished product tailored to the mass market which demands less quality—but more red meat—less fat, less marbling and less finish.

Just as the chain store has dominated the broiler market industry for the past several years, we think it is significant that the chain store is now dominating the beef cattle market. They have captured a new market with new marketing concepts. This market requires a lower cost cut—a cut that can be produced cheaper in volume and sold cheaper in volume. This means marketing beef carcasses weighing from 550 lb. to 650 lb. which can be produced, for the most part, by the utilization of cheap roughages with only a small amount of the more expensive high concentrate rations. It also means that we start feeding at lighter weights, we finish at lighter weights and we feed to lower grades.

CONTRACT FEEDING—It appears to me that contract feeding by most large packers is not a matter of furnishing themselves with a constant supply of beef animals for slaughter as is often claimed. This is "hog wash." Any packer can get all the animals he wants if he will pay the price. Rather, we would think that contract feeding by large packers is a means, or a tool, for beating the price down on live animals. Packers who supply only a small portion of their own daily requirements from their own contract cattle feeding operations appear to have the ability either to back completely out of the market or to make purchases reluctantly to depress the beef cattle market in favor of the packer. It appears that this may give the packer an unfair market position, and there is currently much speculation that federal legislation may be forthcoming which may affect this situation to the benefit of the feeder.

Contract feeding outside of the packing industry itself seems to be on the increase due, we suppose, primarily to the large investment required in cattle feeding and the individual cattle feeders' inability to finance such operations.

INTEGRATION—We do not believe, however, that feed manufacturers will be big prime contractors in the beef cattle feeding business on an integrated basis in the immediate future, due to the large investment required in the cattle and the small amount of supplemental feeds normally sold by the feed manufacturer in fitting the animals to today's mass market. Here again the inclusion of cheap roughage in the rations would seem to be a deterrent to the feed manufacturers' participation in such a program.

If and when cheaper complete rations can be perfected, or when new discoveries make the feeding of complete concentrated cattle rations more practical, this situation may change. But, for the present, we do not believe that we will see too much integration in beef cattle feeding on the part of feed manufacturers.

We believe that, in order to fit the finished beef carcass to the mass market, it will be necessary to fatten while we grow beef animals in order to achieve a satisfactory finish at a much lighter weight. Self feeding on pasture is one answer to this problem and is becoming more prevalent in the last couple of years where there is a combination of grassland and grain concentrates available.

DISTRIBUTING—While many large commercial feed lots and others buy their feed on a direct basis from feed manufacturers, by and large we believe that there is a place in the distribution pattern for an intelligent, aggressive dealer to render a service to any sized feeder; provided his compensation is related to the service rendered. In other words, I think that a dealer must be a big enough man, mentally, to render intelligent advice and consultation to the largest feeders in his area, and that the price for his service should depend upon what he does for his customer. Certainly, where a dealer warehouses and delivers feed to a customer, he is entitled to more money than he is where he simply takes an order and forwards it to the company for direct shipment.

Also, the compensation which a dealer gets might be influenced by whether he finances the account or whether the feed company carries the account. In the final analysis, compensation has to be comensurate with the facilities and services rendered, whether it be in the feed business or in any other business. Unfortunately, many of our feed dealers today want to "receive without giving" and this just doesn't work out in business.

Some Wear Two Hats

Many of our dealers are today wearing two hats very successfully. When they "carry bags on their back," so to speak, they charge the feeder one price. When they put on the other hat, they act as a broker and a counselor for a much smaller fee, on a per ton basis. In most all cases, they are winding up with a far greater net on their brokerage-type business than they are on the feeds which they bring into their warehouse and distribute in smaller quantities.

CONCLUSION—I believe that 1962 will be a good year for the feed industry, but not without the continuing turbulence which seems to be prevalent in most industries. For those of us who can "roll with the punches" and meet the challenges of a rapidly changing industry, we be-

SELF FEEDING ON PASTURE—The author of this outlook article on beef cattle feeding believes that, because of changes in the mass market for beef, it will be necessary to fatten animals while they grow. E. F. Dickey, president of Honeggers' & Co., Inc., Fairbury, Ill., mentions in his analysis of future prospects that self feeding on pasture may be one answer to the challenge of achieving a satisfactory finish at a lighter weight. This approach, of course, would be of concern to the feed industry.

lieve that 1962, like most previous years, holds great opportunity for progress and expansion.

Beef cattle prices have been seriously depressed during the past 18 months because of over-production of broilers and turkeys. This has resulted in disastrous price levels in those industries, and has cost cattle feeders hundreds of millions of dollars because of cheap poultry meats dumped on the market. We believe that economic forces will eventually correct some of the bad practices in the broiler and turkey field. This correction should allow cattle prices eventually to increase to a little more profitable level.

Continued research in beef cattle feeding will also eventually result in a more realistic ratio when compared with the cost of producing other meats.

The inclusion of pasture or other cheap roughages in the beef ration will continue to offer an excellent hedge against declining prices in today's hazardous beef cattle feeding situation.

We recommend that members of the feed industry include a barrel of aspirin as an early inventory shipment in 1962 and be prepared to accept and grow with our changing times and marketing patterns.

Stock Sale Begins for Mississippi Facility

COLLINS, MISS.—Mississippi Federated Cooperatives has begun the sale of stock to finance in part the construction and equipping of a poultry processing plant near Collins. The plant will cost more than $1 million.

A total of $9,500 in MFC Class B preferred stock was subscribed and pledged at a stock sale kick-off luncheon in Collins. Goal of the sale is $50,000 in stock to Covington County residents. The stock pays a 5% annual dividend.

Of the approximately $1 million cost of the new facility, $800,000 will come from a bond issue recently voted by Covington County residents, MFC will add $200,000 and county residents are being asked to purchase $50,000 in stock.

The plant will be constructed on a 29-acre site with a 1,000 ft. frontage on Highway 49 north of Collins. The main building, which will have 42,000 cu. ft. of cold storage space with a daily capacity of 100,000 lb. of broilers and hens, will contain 40,000 sq. ft. of floor space. Equipment will allow processing of poultry in any manner the market demands, it has been pointed out.

In addition to the main building, a by-products plant containing 8,000 sq. ft. of floor space will be constructed. Plans are to add other buildings as needed.

It was reported at the stock sale meeting that grading of the plant site is virtually completed, and that contracts for construction will be awarded soon. Target completion date is Sept. 1, 1962.

Report on Rendering Process Said to Yield Weaning Feed Product

NEW YORK—Members of the National Renderers Assn., at their annual convention in New York, heard a progress report on a "promising" new enzymatic hydrolysis rendering process which is said to yield a product suitable for use in weaning feed preparations.

The report was made by George F. Sachsel, chief of the chemical process development division, Battelle Memorial Institute, Columbus, who reviewed protein recovery research projects sponsored by NRA, most promising of which he said is the enzymatic process.

Mr. Sachsel also reported on a new solvent rendering process. This process is based on beneficiation of ground meat scraps or raw feed in a fat solvent of a density between that of protein and bone. He said it permits rapid separation of fat, protein and bone, yielding protein products of better than 70% protein concentration, and bone products relatively low in protein (10-15%).

Protein fractions separated in this manner were found to be readily hydrolyzable by either acids or enzymes and yielded light-colored powdered materials on spray drying that were highly water soluble, Mr. Sachsel reported.

Enzymatic Process

The enzymatic hydrolysis process Mr. Sachsel termed "technically feasible and economically attractive, yielding a product suitable for new markets, such as weaning feed preparations." He called this process "most promising."

The process consists of the use of proteolytic enzymes added to the ground, raw tissue, along with appropriate activators and buffers in a water slurry. After agitating this mixture for about two hours at 120° F., the adherent protein is released from the bone, the fat is released from the tissue and about three fourths of the free protein is solubilized, it was explained.

Mr. Sachsel said the degree of solubilization and some exploratory pepsin digestion work suggest that this protein material is very likely to be a suitable source of protein for weanling pigs. "This is a significant step forward in opening up a previously identified new market for renderers' protein," he added.

Based on these findings, Battelle has recommended the operation of a pilot plant be undertaken as the next step. This would lead to refined cost and design data and sufficient material for analyses and animal feeding tests, it was explained.

Mr. Sachsel was quoted in The National Provisioner as saying the only important problem foreseen at present is the possible formation of emulsions during processing.

He also said, "The operating conditions in the process are designed to minimize damage to protein and fat and the appearance of the products seems to confirm that this has been achieved."

A program on improved production and utilization of fats, emphasizing appraisal of possible untapped markets and exploratory research on dry-fat production is also under way.

Both the experimental protein recovery program and the fat studies were initiated in September, 1960. A report on the economic aspects of fat recovery and utilization was issued in April, 1961. It drew attention to a potential market of up to 200 million pounds per year for a suitable dry-fat product, and pointed out opportunities for ozonized tallow and fatty nitrogen compounds.

A subsequent report on experimental exploration of methods for making dry fats, issued in June, 1961, showed technical feasibility for a process using primarily renderers' materials and defined the direction for future studies to perfect the physical properties of the product.

Southeastern Group To Hear Dr. True

ATLANTA — Dr. G. Herbert True will be keynote speaker at the 1962 Southeastern Poultry & Egg Assn. convention, according to A. A. Middleton, chairman of the convention program committee.

The convention will be held Jan. 29-31 in the new Merchandise Mart, Atlanta. Bob Martin, executive secretary of the association, said advance registrations indicate a record attendance.

Dr. True, an executive with the Institute of Visual Research, will head a list of outstanding speakers, convention officials said. He will speak at 2 p.m. Jan. 29.

Formerly a professor at Notre Dame University, Notre Dame, Ind., his career has included teaching, writing, copywriting and radio and television production and direction. He received his master's degree from Northwestern University, Evanston, Ill., his doctor's degree from the University of Iowa, Iowa City, and did special work at the University of Chicago on creative behavior.

"We feel the combination of new facilities, an outstanding program and streamlined programming will provide a valuable and stimulating meeting for all members of the poultry industry," Mr. Martin said.

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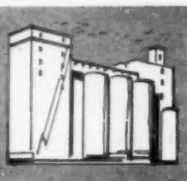

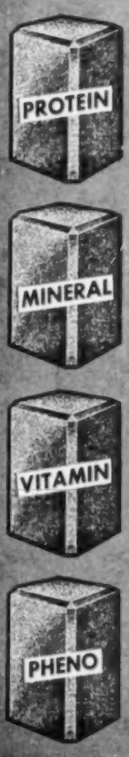

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Protein Requirements of Broilers As Influenced by Fish Products

By Prof. T. D. Runnels
University of Delaware

Calculations reveal that the use of approximately 5.0% fish meal and 2.5% condensed fish solubles to replace a like amount of soy protein in a simplified (corn-soy) broiler diet results in considerable modification of the amino acid balance. When the level of essential amino acids supplied by the diets is compared to the chicks' requirements, it appears that the diets supplemented with fish products meet the chicks' requirements for essential amino acids at a lower protein level than for the simplified diets. To test this hypothesis, three chick feeding experiments were conducted. Graded levels of protein were used as treatments in each experiment with and without fish products. Broiler-type chicks were used, and the management was as nearly the same within each experiment as possible. The basal diet used in Experiment 1 is recorded in Table 1. It serves as an example for the basal used in the other two experiments. The results of equating the diets for energy are shown in Table 2, which records the actual diets used in the 16 and 22% protein levels with and without fish products.

RESULTS AND DISCUSSION—The results from Experiment 1 are recorded in Table 3. The improvement in both growth and feed utilization attributable to the fish products was greatest at the lower protein levels, but it appears that the protein levels were not sufficiently high to produce a definite plateau on either of the diets.

The results from Experiment 2 are recorded in Table 4. It was designed to provide wide differences in protein in order to establish limits for future experiments. These data were interpreted to show that the weights of the chicks would plateau on the corn-soy diet at a protein level in excess of 22% while the plateau occurred on the diets supplemented with fish products at less than 22% protein.

The results from Experiment 3 are recorded in Table 5. The choice of protein levels appears to have been fortunate in that the original hypothesis regarding growth was clearly demonstrated. These data were interpreted to show that the growth of broilers receiving the control (corn-soy diet) produced a plateau in their growth curve at between a 21 and 24% dietary protein level while the diet supplemented with the fish products produced a similar growth plateau from a dietary protein level between 18 and 21%. Feed utilization as in the other experiments continued to improve with increased protein levels.

A study of the data from all three experiments appears to confirm the original hypothesis that in the growth curve for a given experiment the plateau occurred at a lower protein level for the diets supplemented with fish products than from the simplified (corn-soy) control diets. However, this hypothesis was not demonstrated for feed utilization. These data were interpreted to show that the addition of fish products to the diet greatly improved feed utilization at all protein levels. Increasing protein also improved feed efficiency to the highest level used without any definite plateau indicated.

CONCLUSIONS—The results from three chick feeding experiments have been presented. Graded levels of protein were used in the diets for each trial and the simplified rations were fed with and without a combination of approximately 5.0% menhaden fish meal and 2.5% condensed menhaden fish solubles. All diets were equated for energy.

The growth data revealed that the

TABLE 1. (Experiment 1) Basal Mash

	Lb.
Ground yellow corn	83.48
Dehulled soybean oil meal	15.00
Trace minerals	.16
Sodium chloride	.56
Premix*	.80
	100.00

*The Premix supplied the following materials per 100 lb. of basal mash: Vitamin A, 240,000 units; vitamin D, 80,000 units; vitamin K (as hetrogen), 168 mg.; vitamin E, 400 units; riboflavin, 0.32 gm.; calcium pantothenate, 0.8 gm.; niacin, 2.4 gm.; choline, 36 gm.; vitamin B_{12}, 8.8 mg.; folic acid, 1.5 mg.; B.H.T., 9 gm.; Tarramycin, 0.8 gm. (The coccidiostat Amprolium was also added to the diet of the broilers grown in floor pens.)

Note: This mash was modified as demonstrated in Table 2 to equate for energy, calcium and phosphorus before being fed.

TABLE 2. (Experiment 1) Example of Method Used in Equating Diets

	Control 16% Protein	16% Protein + Fish	Control 22% Protein	22% Protein + Fish
Basal mash	100.00	100.00	100.00	100.00
Ground yellow corn	35.42	41.30	3.10	9.05
Dehulled soybean oil meal	14.80	2.22	39.80	27.22
Stabilized animal and vegetable fat	3.18	.50	10.50	7.75
Steamed bone meal	6.60	5.30	6.60	5.30
Menhaden fish meal	....	7.69	....	7.69
Condensed fish solubles	....	2.99	....	2.99
Total pounds	160.00	160.00	160.00	160.00

All diets were equated for 1,031 calories of productive energy per pound and for protein as specified. All diets were fortified to supply adequate levels of vitamins and minerals.

TABLE 3. (Experiment 1) Summary of Data
White Rock Cockerel Chicks Eight Weeks of Age

Per Cent Protein	Average Body Weights in Pounds: Corn-soy Control Diets	Average Body Weights in Pounds: + 5% Fish Meal + 2.5% Fish Sol.	Feed Utilization (Feed/Body Wt.): Corn-soy Control Diets	Feed Utilization (Feed/Body Wt.): + 5% Fish Meal + 2.5% Fish Sol.
16	2.59	3.06	2.44	2.24
18	3.03	3.24	2.16	2.19
20	3.25	3.32	2.11	2.17
22	3.30	3.60	2.09	2.01

Note: These diets were equated to supply 1,031 calories of productive energy per pound. Ten chicks were grown in each battery brooder and each treatment was replicated twice.

T. D. Runnels

AUTHOR—Prof. Runnels is a poultry nutritionist at the University of Delaware, Newark, Del. He was educated at Oklahoma State University and West Virginia University. His early experience was in the commercial field and that has served as a background for his research work. Prof. Runnels has been at the University of Delaware for over 12 years. He has published over 60 articles and is known for his research in broiler nutrition. His published articles have covered: Antibiotics, stabilized feed grade fat, trace minerals, potentiation, unidentified growth factors, unextracted processed soybeans and other subjects. The accompanying article is published as miscellaneous paper No. 401 with the approval of the associate director, Delaware Agricultural Experiment Station.

chicks receiving the diets supplemented with fish products achieved optimum weights for their experiment at a lower protein level than was achieved by the chicks receiving the simplified (corn-soy) diets. This effect was interpreted to mean that the addition of the fish products to the diet improved the amino acid level or balance to the extent that less protein was required to meet the chicks' requirements.

The feed utilization data did not follow the same pattern as presented by the growth data. Feed utilization was greatly improved by the addition of fish products, but additions of protein also improved feed utilization to the extent that the highest protein levels produced the most efficient feed utilization in every experiment. This would appear to confirm chick studies with pure amino acids which have demonstrated that for a given experiment a higher level of supplementation is required for optimum feed utilization than for optimum growth.

High-Nitrate Silage Lowers Vitamin A in Test Lambs' Livers

URBANA, ILL.—In a recent study at the University of Illinois, all lambs receiving a "high-nitrate" silage exhibited liver vitamin A stores that were significantly lower than the liver stores of comparable lambs receiving a "normal" silage ration, persons attending the university's annual Sheep Day were told.

In the study, lambs were fed a basal "high-nitrate" corn silage ration to which was added nitrite (2.7% KNO_2, equivalent dry basis), vitamin E (120 mg. alpha-tocopherol acetate per day) and Tapazole (100 mg. per day) in a 2 x 2 x 2 factorial trial.

This experiment was designed to study the main effects and interactions of these treatments on the vitamin A status of the animals, according to those working on the study, Dr. E. E. Hatfield, Dr. G. S. Smith, Dr. A. L. Neumann, Dr. R. M. Forbes, Dr. U. S. Garrigus and O. B. Ross.

They say that vitamin E supplementation tended to support higher plasma and liver levels of vitamin A, whereas both nitrite and Tapazole tended to decrease plasma and liver vitamin A levels. "The interaction of nitrite x vitamin E x Tapazole was significant ($P < .05$)," said the research group. "All lambs receiving the 'high-nitrite' silage exhibited liver vitamin A stores that were significantly ($P < .001$) lower than the liver stores of comparable lambs receiving a 'normal' silage ration."

The researchers' comments on the results of their study follow:

"The most apparent differences in the observations were between the lambs receiving the 'high-nitrate' corn silage and the lambs receiving the 'normal' corn silage ration. Weight gains were low (average 0.15 lb. per day) in all 'high-nitrate' corn silage ration treatment groups and did not differ significantly among groups; however, they were considerably below the average daily gain (0.30 lb.) made by lambs receiving the 'normal' corn silage ration. Plasma vitamin A values did not differ significantly among groups of lambs fed 'high-nitrate' silage; however, all were below the values for lambs fed 'normal' silage (17 vs. 59 mcg. % $P < .001$). Liver stores of vitamin A were lower in all groups fed 'high-nitrate' silage than in lambs receiving 'normal' silage (698 vs. 1,331 mcg. vitamin A per kg. body weight, $P < .001$)."

Equipment Installations

PORT HURON, MICH.—Bryant Engineering Co., Port Huron, manufacturer of feed mill machinery, has reported several installations recently of mill equipment.

Included were 10 hammermills, eight coarse crushers, four feed mixers, six shellers, a roughage mill and a crusher-feeder. The installations were made in 10 different states.

TABLE 4. (Experiment 2) Summary of Data
White Rock Cockerel Chicks Eight Weeks of Age

Per Cent Protein	Average Body Weights in Pounds: Corn-soy Control Diets	Average Body Weights in Pounds: + 5% Fish Meal + 2.5% Fish Sol.	Feed Utilization (Feed/Body Wt.): Corn-soy Control Diets	Feed Utilization (Feed/Body Wt.): + 5% Fish Meal + 2.5% Fish Sol.
22	2.58	3.04	2.34	2.29
26	2.78	3.01	2.32	2.17

Note: These diets were equated to supply 1,050 calories of productive energy per pound. Fifty chicks were grown in each floor pen.

TABLE 5. (Experiment 3) Summary of Data
Equal Sexes of Vantress Cross Broiler Chicks 10 Weeks of Age

Per Cent Protein	Average Body Weights in Pounds: Corn-soy Control Diets	Average Body Weights in Pounds: + 5% Fish Meal + 2.5% Fish Sol.	Feed Utilization (Feed/Body Wt.): Corn-soy Control Diets	Feed Utilization (Feed/Body Wt.): + 5% Fish Meal + 2.5% Fish Sol.
18	3.44	3.64	2.75	2.65
21	3.63	3.98	2.67	2.54
24	3.98	3.92	2.54	2.43

Note: These diets were equated to supply 1,007 calories of productive energy per pound. Ten chicks were grown in each battery brooder and each treatment was replicated three times.

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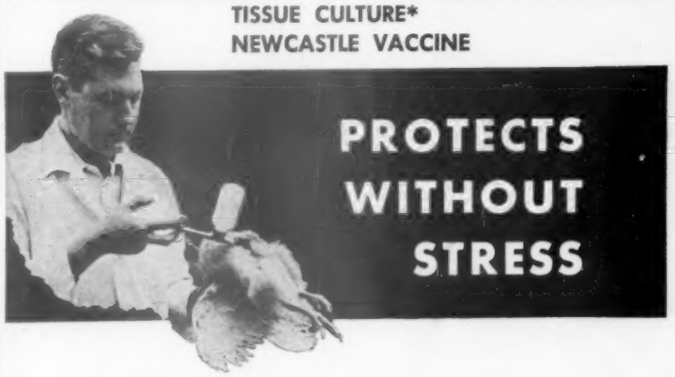

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Enthusiasm for Cattle Feedlots Shown at Arkansas Conference

By DAVID MARTIN
Feedstuffs Special Correspondent

LITTLE ROCK, ARK.—Interest in cattle feeding projects and feedlot operations is increasing steadily in Arkansas, and the state's agriculture industry appears set to embark enthusiastically on this new venture to try to put more dollars into the farm economy.

To help producers formulate their plans, the Arkansas Farm Bureau Federation recently sponsored a conference, "Feeding Cattle for Arkansas Markets," here in connection with its 27th annual convention. And many of those attending the conference agreed that plans are being made for feedlots in all sections of the state, particularly in the delta area of east Arkansas and in southwest Arkansas.

Although there has always been some sentiment for feeding cattle in Arkansas, the movement only recently gained its present popularity. The reason: Figures that show that the state's meat packers purchase some 80% of the beef cattle they slaughter from out-of-state markets. Moreover, studies showed that virtually all of the good and choice grades killed in Arkansas come from beyond the state's boundaries.

As a result of the study, agricultural officials have been pointing to the potential for supplying the Arkansas market. There appears to be little sentiment for establishing feedlots to finish cattle for midwestern markets.

Prospects Good

A. L. Owen, an extension marketing specialist, told more than 200 persons at the conference that prospects for feedlots in the state are good and growing. But he cautioned that there has not been and probably will not be any big increase in cattle feeding operations in the near future. Instead, it probably will be a slow, steady growth.

"Although I do not look for any big boom in Arkansas cattle feeding, I believe there is a good opportunity for the establishment of a limited number of privately owned and commercial feedlots."

He said that farmers probably would be better off financially if the feedlots are set up on a cooperative basis. This way, he told the conference, producers could obtain better production, management and markets for a much lower over-all investment.

"If the cattle feeding business in the state continues to grow as it has in the past, there is a good possibility that we can make it a profitable operation," he added. "We must consider, however, that we have to compete vigorously with two important cattle feeding regions—the commercial feedlot area of the West and the conventional farm feeder area in the Corn Belt."

He said producers will have to feed their cattle to the grades of good and choice if they hope to compete successfully for the markets provided by the major meat packers in this area.

Although cattle have traditionally been finished on high-concentrate/low-roughage rations, speakers at the conference strongly supported the use of high-roughage/low-concentrate rations for finishing cattle in Arkansas. They said this type of ration would be more adapted to the state's ability to produce large amounts of roughages as opposed to small quantities of grains.

Comparison by Feed Man

Ted Darragh, vice president, the Darragh Co., a Little Rock feed concern, discussed the question, "How do Arkansas Feed Costs Compare With Costs in Other Areas?"

"We pay more for grains, less for roughages and about the same for supplements," he said in summing up feed costs. Like other speakers on the program, Mr. Darragh advocated the use of a maximum amount of roughages.

He said he had made a study in which Arkansas feed costs were compared with feed costs in four major feeding areas. The regions included the Southwest, Texas-New Mexico, Iowa-Nebraska and the West Coast.

Arkansas had an unfavorable grain cost position. At the present time, Mr. Darragh reported, corn is selling for $1.27 bu. or $45 ton in the Little Rock area. This compared to prices of $38 ton in Iowa. Morever, corn prices were $1 ton higher in Georgia, $2 ton higher in Texas and $5 ton higher on the West Coast.

Mr. Darragh said milo sells for approximately $40 ton in Arkansas, $42 ton in Georgia, $35 ton in New Mexico and Texas and in Iowa and Nebraska, and $40 ton on the West Coast.

"So you can see," he pointed out, "that we have a distinct disadvantage on the price of grain. As a result, the high-concentrate rations are not appealing to our feeders."

But he reported figures showing that Arkansas has a good advantage over other areas when it comes to the cost of roughages.

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(Turn to ARKANSAS, page 50

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UP OR DOWN

By Dr. Leonard W. Schruben, Agricultural Economist, Kansas State College

Seasonal Pattern Boosts Milo Price Prospects

Since spring 1961, milo prices have held well above those of 1960. Higher support rates generally are credited with a part of the boost. Support rates were increased by 41¢ cwt. to a level of $1.93 for the 1961 crop.

There will not be as much advantage to buying milo grain sorghum and sell or seal corn this year as has been the case in recent years. Prices of the two grains are more nearly in line with their relative feeding values. Price support rates also more nearly reflect feeding values of the two grains. Local market situations will vary so you should compare prices in your area.

How Prices Behaved

You can see how prices behaved in 1960 and so far in 1961 by looking at the accompanying illustration. Weekly prices are shown basis No. 2 milo at Kansas City. Prices in 1961 dipped during the March-April period and for a few weeks after the feed grain bill was being debated and passed in Congress. Government sales and an uncertain sales policy unsettled the markets.

Supports at a rate comparable with relative feeding values of corn resulted in the 41¢ increase. After market interests, which include farmers of course, became fully familiar with the price effects, prices advanced. The usual seasonal strength in milo prices combined to give the price a midsummer boost.

Harvest usually sees the low price for the season. Some recovery generally occurs by December when the groundwork is laid for prices to advance into the summer.

Kansas farm price of milo went up from December to February two out of three years since 1940. Milo prices have gone up from December to June about three years out of four during the same period of years. This gives an indication of the seasonal boost to prices which has occurred during the past seasons. So far, the pattern this season points to an advance in prices by midsummer.

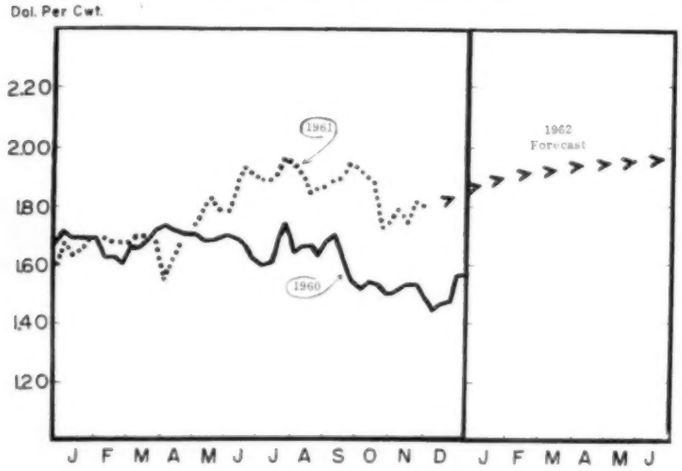
Price Outlook

What about prices the first half of 1962? Government action dominates the grain market because of the large supplies owned by the government. Government policies and changes in them are difficult to predict. It's too easy, however, to overrate the job the government can do. Economic forces sometimes make even the power of government take a back seat.

Prices will be under heavy pressure of supplies. There are plenty of feed grains in the country to meet foreseeable needs this season. Although prices are expected to improve as the season progresses, large increases are not likely to take place.

You can see how Kansas State University economists view the prospects for 1962 by looking at the right hand part of the accompanying graph. Here the forecast is pictured. If it turns out to be wrong, I hope you remember how often it has been mentioned in this column that no one has yet discovered a method of forecasting prices which will result in the correct forecast every time. If it is correct, we will keep reminding you of it until the next time we correctly anticipate price action.

Cash Price of No. 2 Milo at Kansas City



Ohio Nutrition Forum Planned for Jan. 11

WOOSTER, OHIO—The 3rd Ohio Nutrition Forum will be held Jan. 11 at Wooster in the assembly room, administration building, Ohio agricultural experiment station, it has been announced. Sessions will begin at 9:30 a.m.

The forum will be sponsored by Ohio State University, Columbus, the Ohio agricultural experiment station and the Ohio Grain and Feed Dealers Assn.

The morning session, to be led by Dan McGrew, Ohio State faculty, will include:

"Systems of Roughage Evaluation," Dr. Ron Johnson, experiment station, Wooster; "The Application of the Cutting Date System to the EDPM Production Testing Program in Ohio," Dr. John Stabus, Ohio State faculty, and "High Concentrate Feeding of Dairy Cows," Milton P. Kalmbach, nutritionist, Ohio Farmers Grain and Supply Assn., Fostoria. Discussion leader on the above topics will be Dr. Stabus.

In the afternoon the program, to be led by Frank Varga, nutritionist, Wooster Feed Manufacturing Co., Wooster, will include:

"The Feed Industry in Europe," Dr. Howard S. Teague, experiment station, Wooster; "Factors Influencing Breeding, Gestation and Farrowing Performance," Dr. Teague. Discussion leader on the sow topic will be Ken Schuman, nutritionist, Ohio Grain Co., Milford Center. The program will end with a general discussion period.

Rutgers Develops Solar Laying House

NEW BRUNSWICK, N.J.—A Rutgers University research team believes that a low-cost solar layer poultry house developed at the institution is ready to be introduced to New Jersey poultrymen.

The house is the result of a project initiated in 1956 to design and evaluate the performance of a structure with: (1) Low initial cost per bird, (2) low maintenance and depreciation costs and (3) features which permit maximum utilization of solar radiation during winter months to maintain a desirable litter and environment for the birds.

Charles H. Reed, Rutgers professor of agricultural engineering, reports in a recent issue of "New Jersey Agriculture" that as finally developed, the house will maintain dry litter with an equivalent of one Leghorn layer for every 2 sq. ft. of house floor area and it has been demonstrated that the building can be used for housing layers on the floor and in community and individual cages.

Dries Litter

Prof. Reed says the building is designed to permit the sun's rays to enter the solar front and to warm and dry the litter on the southern half of the house floor. Roosts and equipment are in the northern half of the house.

The house's front, tilted 67° from the horizontal plane, adds to the usable floor area, is self cleaning and admits 10-20% more radiation than a vertical front, Prof. Reed reports. "This tilt is a compromise between 55°, the ideal for solar heat penetration in winter in New Jersey, and a tilt which will permit the snow to slide off." The solar front may be added to existing houses facing south.

"This house appears to be ideal for the eastern coastal area where, except for Florida, there is the greatest amount of winter sunshine in the U.S. and where severe winter blizzards are unusual," the agricultural engineer notes.

Warm in Winter

"During December and January, daily mean inside temperatures have been 15° higher than outside. Mean radiant temperatures (radiant heat from the sun) have been more than 100° F. on sunny days during the winter.

"No attempt is made to conserve heat within the house. In summer, inside daytime temperatures are cooler than outside, and night time inside temperatures are 4-7° warmer than outside temperatures when the upper front sashes are down and the back panels open."

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PICTURE WINDOW EGGS — Small glass beakers and clear plastic eggs are being used at Clemson College, Clemson, S.C., in studying the growth of chick embryos. Previously, scientists had to break the egg shell, killing the embryo. Now, with "picture window eggs" associate poultryman M. A. Boone and laboratory assistant Mrs. Patti Cowart can observe day-to-day development under incubation. Life has, thus far, been maintained eight days, when the basic formation of the chick has been completed. Mr. Boone says it is hoped that this new method will be of value in checking effects of hormone and vitamin injections.

Honegger School Attended by 30

FAIRBURY, ILL.—Thirty Honegger representatives — dealers, their employees and sales personnel—attended a recent Honeggers' farm service school at Fairbury.

The school consisted of five days of lectures, classroom discussions and practical on-the-farm demonstrations. The curriculum, designed to help the students give improved service to the farmers in their area, covered the latest advances in agricultural research, feeding programs and sales techniques.

Honeggers officials were instructors. On a tour of the 600-acre research farm, students saw how new feeding programs and management practices were born and perfected. The students also saw the company's large, modern breeder hatchery and modern electronically controlled push-button feed mill.

Those from Kansas were: John Carl Strahm and Mel Wenger, Sabetha; Glen Herring, Winchester; Wesley Steanson, Topeka, and Aaron Buller, Halstead.

Students from Iowa included: James L. Spurrier, Jr., Maxwell; Jim Morris, Waukee; Ed Sheridan, Iowa City; Robert Lee Miller, Pilot Mound, and Harold C. Mills, Salem.

Nine men from Illinois attended the school: Roy Wilson, Herscher; Lyle Butler, Washington; Leonard E. Troxel, Rankin; Frank Long, Rushville; Ron Steidinger, Forrest; Lavern H. Neuleib, Prophetstown; Stan McCulloh, Tence Williams and Howard Marshall of Fairbury.

Ohio students were Robert E. Grogean and John D. Heiby, Versailles, and Bernard L. Kay, Hillsboro.

Robert D. Shultz, Burr Oak; Daniel Northrup, Decatur, and James Rockafellow, Pewamo, represented Michigan.

Other states represented were Nebraska: Floyd Tonniges and Jerry Tonniges, Gresham, and Bert Hunke, Norfolk; Kentucky: Roy Medley, Elizabethtown; Minnesota: Bernard J. Bleess, Waldorf.

Promote Poultry, Eggs

CONCORD, N.H.—The New Hampshire Poultry Growers Assn. has launched an intensive campaign to promote poultry and eggs produced in New Hampshire. It is being financed by the association, the New Hampshire Planning and Development Commission and growers participating in the state's Seal of Quality program.

Being used to help promote the poultry industry, according to Edward J. Lobacki, Peterborough, is a sound motion picture.

He also reported that the association has 11 chicken barbecuing racks and a pit capable of handling 100 servings which can be borrowed without charge in the promotion of the chicken meat business. The equipment is at the University of New Hampshire poultry farm, Durham.

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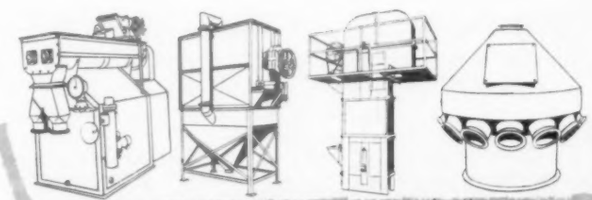

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The

OUTLOOK

From the

EGG

Point of View

Possibility of Marketing Orders Could Set Off Frenzied Climb in Egg Output

By I. S. Riggs
The Quaker Oats Co.

The possible actions of the federal government are the largest single unpredictable factor in any 1962 forecast concerning feed prices, egg prices, size of hatch or credit for the egg producer.

The government has now opened the door to marketing orders for turkeys. Perhaps broilers and eggs will be next. According to Assistant Secretary Ralph's own statement, marketing orders are only a first step and production controls based on history must follow for the "long haul." Thus any predictions for 1962 must be made in light of the uncertainties created by the possibility of marketing orders.

The big gamble that the turkey industry made in 1961 to establish large bases (a $1 per bird gamble, some people calculate) may be a two-pronged sword, resulting in immediate cash losses as well as long-term losses in freedom in the market place. Commercial egg people should be aware of the thinking that led to the 1961 situation in the turkey business.

In addition to restraints on feed ingredients in the market place, we may see further restraints to free enterprise interplay applied to the hatchery, the egg producer and the egg processor.

Per Capita Consumption

Egg consumption per capita has been in a steady, slow downward spiral for several years. (See chart below.) Price seems to have had little effect in stopping this drop. At the same time population has been expanding by slightly less than 2% per year, production per hen has increased about the same amount, so any major expansion in hen numbers adversely affects egg prices.

According to the Poultry Survey Committee, the laying flock will be down by 1% as of Jan. 1, 1962, and should also be smaller for the first three months of 1962. However, due to the increased fall hatch, the flock is expected to be larger each month from April through June.

Basis the forecast of this committee, the average (U.S. farm average) egg price for January-March should be 32-33¢, or about 5-6¢ per dozen under 1961 levels. This committee also expects prices to break in April, but to average 28-29¢ for the spring months. This would be 3-4¢ under 1961 prices—about 2-2½¢ above the disastrously low prices of the spring of 1959.

Prices the last months of 1962 will be greatly influenced by the spring hatch. The low spring egg prices will probably prevent many of the "inners and outers" from getting in the egg business. A hatch about the same as 1961 should give fall egg prices of around 32-33¢ and winter prices about the same as 1961—35-37¢.

According to the Poultry Survey Committee, average 1962 egg prices will probably be in the 32-33¢ range. This will not appear too encouraging to the poorer than average producer. It could result in continued slow expansion for the more efficient.

Feed Prices

Generally, I expect that the average price of complete laying feed may be higher in 1962 than it was in 1961. For two consecutive years the egg-feed ratio has shown a gradual, small increase in the price of laying feeds. Of course, the feeds are generally improved as pounds of feed required to produce a dozen eggs have declined.

There should be ample corn and milo—but the basic prices are pegged by various government programs. Soybean production should be ample for the numbers of feed-consuming units available or anticipated. These three commodities are the major determinants of laying feed price.

Credit Needs

The credit needs of the egg producer continue to expand—as is true of all agriculture. Feed credit to egg producers has largely been through pullet financing programs under which the feed for growing the pullets is financed, to be repaid during the first part of the production period.

The success of these "payouts" has been directly correlated with the net worth of the borrower—and the egg market. With the prospects of egg returns being under that of 1961, it is logical to expect greater selectivity of pullet finance accounts—and a real restriction on expansion capital for new buildings and equipment.

While pullet financing as such seems to have been desirable from the standpoint of the producer, it has not been highly attractive to the feed manufacturer. It requires large sums of money, extended over a long period of time, for relatively small feed tonnage.

Cautious Expansion

Some expansion may be expected in mills "owning their own production" or "contracting." It is anticipated that even this expansion will be more cautious and a number of feed mills are restricting this type of operation.

So far, federal intervention has not seriously affected research, which has been the keystone not only of the poultry business but of all agriculture. Even here, however, restrictions have been imposed which have stopped or delayed some research in the drug field. Egg feed research will emphasize the continuing improvement in performance of laying rations and reduction of pullet grow-out costs. It is difficult to pinpoint any one or more major advances expected in this area in 1962.

Egg Marketing

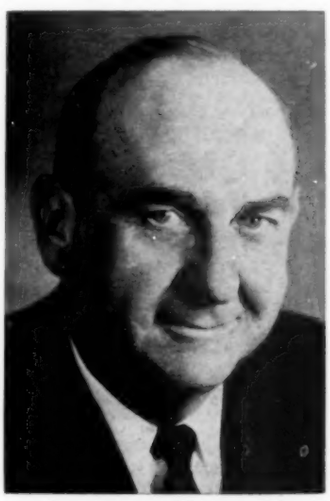
While there is greater and greater interest in the effective marketing of eggs, there would appear to be a declining interest on the part of the feed industry to subsidize egg marketing out of feed manufacturing profits. The entire industry will watch with interest the new cooperative endeavor in the Northeast on the part of feed manufacturers, dealers, producers, and marketing agencies in end product marketing as applied to eggs. Anything that will move more eggs through grocery store channels with better quality and at reasonable prices will certainly improve the lot of not only the egg producer but also the feed manufacturer.

I would re-emphasize the possible impact on the egg business of the whole concept of marketing orders. If marketing orders in animal agriculture are to become the order of the day, let us hope this does not set off a round of uncontrolled expansion in the egg business in a frenzied effort to "establish a base."

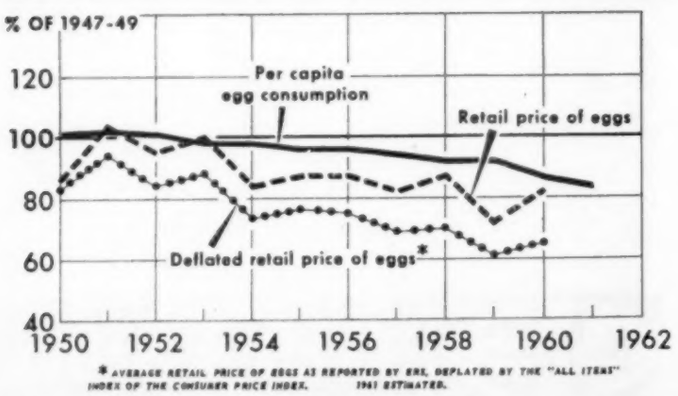
AUTHOR—In 1923, following graduation from Iowa State University with a B.S. degree in agricultural economics, Isaac S. Riggs joined The Quaker Oats Co., Chicago, as a clerical assistant to a poultry nutritionist. Today, after a long association with the feed industry, he is in his ninth year of service to Quaker Oats as vice president of the company's feed department.

In his nearly 40 years with Quaker Oats, Mr. Riggs has been a salesman, a sales office manager, a division sales manager, feed department sales manager, and feed department manager.

In 1958-60 Mr. Riggs was chairman of the board of the American Feed Manufacturers Assn. and is now an AFMA director.

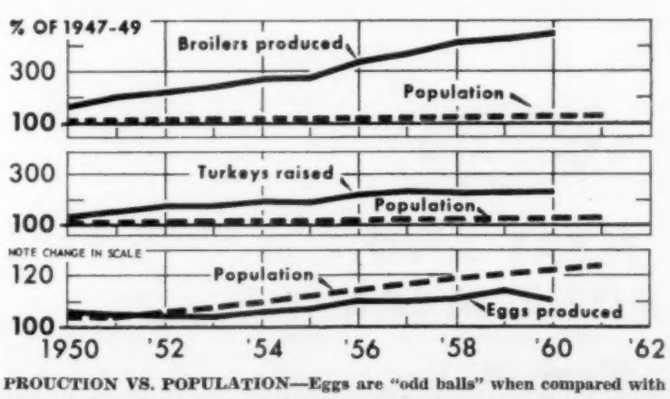


Isaac S. Riggs



* AVERAGE RETAIL PRICE OF EGGS AS REPORTED BY ERS, DEFLATED BY THE "ALL ITEMS" INDEX OF THE CONSUMER PRICE INDEX. 1961 ESTIMATED.

DECLINING DEMAND—This chart prepared by the U.S. Department of Agriculture, showing the trend in falling egg prices and consumption, indicates a steady decline in the demand for eggs.



PROUCTION VS. POPULATION—Eggs are "odd balls" when compared with what's happened to broiler and turkey production relative to population growth, as illustrated in this chart issued by the U.S. Department of Agriculture.

SPECIAL REPORT

on how to use nf-180 prior to vaccination to reduce condemnations

Here's a totally new concept of CRD prevention . . . one that has effectively reduced condemnations in tests involving thousands of birds. It's based on feeding nf-180 prior to stress periods such as vaccination. Here's how it works:

When you vaccinate, you often inadvertently set the stage for a CRD outbreak. The reason is that 3 agents are usually necessary to cause CRD complex . . . PPLO, coliforms and a virus. When a bird harboring PPLO and coliform organisms is vaccinated with a virus, it creates a stress. This stress triggers a rapid reproduction of the usually harmless coliforms, causing lesions in the air sacs, on the kidney capsule and on the liver.

If the gram negative coliform bacteria can be kept inactive during vaccination, condemnations can be substantially reduced.

What can you do?

Certainly you can't stop vaccinating. But you can overcome the *stress* of vaccination with nf-180.

nf-180 is the most effective gram negative (coliform) drug available. It checks the reproduction of the coliform agents . . . keeps them from producing lesions which result in condemnations. Also, since nf-180 is effective against more poultry diseases than any other drug, you get protection against a host of secondary invaders.

For low-cost protection against condemnations due to CRD-air sac complex, feed a broiler ration containing 100 grams of furazolidone (nf-180) per ton beginning at least one week before vaccination and continuing through the stress period.

The following college tests (more available on request) prove nf-180's effectiveness.

Why nf-180 is best in combating CRD complex

CRD complex is caused by a number of primary and secondary organisms.

nf-180 is the most effective drug you can use against CRD complex because *nf-180 prevents and controls more poultry diseases than any other drug you can buy.*

nf-180 kills germs. Starves them to death... doesn't merely slow them down or hold them in check as antibiotics do.

And because nf-180 doesn't allow germs to live and breed sturdier offspring, there is little chance for germs to build resistance to nf-180.

Also, nf-180 is safe and nontoxic. It can be fed right up to marketing. No withdrawal period is required. Insist on nf-180 in your broiler feed to reduce the risk of condemnations . . . to help you market more broilers at less cost, with far more peace-of-mind.

TEST #1 Vaccinated for Newcastle and bronchitis at 2 weeks

Treatment	No. of Birds	Ave. Market Wt. Lb.	Feed/lb. Gain Lb.	% Mortality	% Condemnations	% Total Loss
Control	4,800	3.27	2.61	14.29	8.75	23.04
Furazolidone* 100 gm./ton	7,200	3.37	2.53	6.49	3.25	9.74

*Fed first 3 weeks.

TEST #2 Vaccinated for Newcastle and bronchitis on 24th, 42nd days.

Control*	5,100	3.18	2.74	5.73	2.52	8.25
Furazolidone** 100 gm./ton	5,100	3.21	2.62	1.88	1.65	3.53

*200 grams chlortetracycline/ton in low calcium feed for first 5 days.
**Feed 15th through 49th day. No antibiotics, normal calcium.

TEST #3 Vaccinated for Newcastle and bronchitis at 2 weeks.

Control	4,800	3.19	2.41	2.52	3.10	5.62
Furazolidone** 100 gm./ton	7,200	3.23	2.37	2.28	0.84	3.12

**Fed first 3 weeks.

TEST #4 Effect of furazolidone under farm conditions.

Control*	17,544	3.50	2.41	9.31	4.20	13.51
Furazolidone** 100 gm./ton	15,096	3.65	2.24	4.91	2.03	6.94

*Contained commercially available coccidiostat.
**Contained no coccidiostat. Furazolidone fed at 100 gm./ton first 18 days, followed by 50 gm./ton level to market.

One thing for sure — *prevention* rather than *treatment* of CRD outbreaks is the answer to reducing condemnations. Once the coliform organisms are triggered off, the damage is done and the lesions remain for the inspector to see. Here's how to medicate:

Start chicks on nf-180 — Use the 100 gram level of furazolidone and keep birds on nf-180 until after the first vaccination. This helps prevent CRD, protects against vaccination stress, reduces early mortality, improves feed conversion and growth. (And you won't need a separate coccidiostat during this time.)

Second Vaccination — At least a week before your second vaccination, come in again with the 100 gram level of furazolidone. Continue this through the stress period to prevent CRD outbreaks.

Try this new nf-180 protective feeding plan. Check mortality, weights, feed conversion, condemnations and total costs. You'll see how nf-180 can substantially lower your production cost.

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DANNEN

ARKANSAS

(Continued from page 42)

roughages," he reported. "In the southeast the cost is $15-20 a ton, in Iowa and Nebraska it is $30 a ton, in Texas and New Mexico it is $20 a ton, and on the West Coast it is $30 a ton."

Supplement costs, he stated, are about the same in all regions.

Recommends Percentages

Mr. Darragh said an examination of costs and available feed materials showed that Arkansas feeders probably should use rations comprised of approximately 40% grain, 50% roughages and 10% supplements.

He referred to following figures from studies made at an Arkansas feedlot which accommodates 700 head of cattle: Gains of 360 lb. per animal in 150 days—an average daily gain of 2.4 lb.—at a cost of 18¢ lb. He said this compared to costs of 17.07¢ lb. in Iowa and up to a high of 26¢ lb. in an unnamed area.

He said that miscellaneous costs of 4¢ lb. pushed the over-all cost of each pound of gain in the Arkansas feedlot to 22¢ lb.

"We must look realistically at our costs to determine where we stand," he cautioned. Mr. Darragh said he believed that Arkansans can feed cattle by utilizing a maximum amount of roughages and a minimum amount of concentrates.

What Research Shows

Dr. Maurice Ray, department of animal industry and veterinary science, University of Arkansas, discussed, "Does Research Show We Can Produce Fed Cattle Profitably?"

Dr. Ray said that research by the Arkansas station proves that profits can be made in the state in cattle feeding operations, but he said each operation must be developed according to the operator's facilities and production capabilities.

"Research cannot precisely show if we can produce fed cattle profitably," he said. "We need ideas to use; another man's operation can't be applied to someone else's farm or area."

Pointing out that western commercial feedlot operations are becoming highly mechanized as owners strive to reduce labor costs, Dr. Ray posed this question to the Arkansans: "Can we invest in all of this mechanization if our labor is not the same?"

Commenting on specific problems confronting cattle feedlot operators in Arkansas, he said:

"We have been told that we couldn't feed southern-grown barley as successfully at northern-produced barley. At our experiment station we fed barley to research cattle, and costwise it did not show up as well as corn. However, the cattle fed on barley did have better production records and gains than those fed on corn."

He said that there are some other problems encountered in feeding barley—a large crop in the delta region of eastern Arkansas—that will have to be worked out by agronomists.

Milo Trials

Milo also occupied the attention of Arkansas research men, Dr. Ray reported. He said trials indicated that both corn and barley are better suited to Arkansas feedlots than milo. "It is difficult for us to harvest low-moisture content milo," he said. "Also, our data has shown that we cannot obtain as good gains from milo as we can from either corn or barley. I do not know the nutritional answer, but we are importing milo from eastern Kansas and other areas to try to determine the answer."

Dr. Ray also strongly recommended the use of high roughage rations as the best bet for Arkansas feedlot men.

"We have a good variety of roughages we need to sell—cottonseed hulls, soybean hulls, silage, hay and others," he said. "We believe that we can consistently produce choice grade fed cattle on Arkansas produced calves by utilizing plenty of roughages and the right amount of concentrates."

Dr. Ray held that high-concentrate rations are popular in other areas because they are easily adapted to mechanization.

Relations with Packer

Noting that Arkansas producers have a good market from local packers, Dr. Ray touched on the problem of packer-producer relations.

He scored the old idea that the producer often believes that he has better quality cattle than the packers say they are, suggesting that feeders learn to grade their cattle and then watch USDA inspectors at work in packing plants.

"You will sometimes swallow your pride when the USDA man stamps 'standard' on a carcass you thought was much better in quality," he declared.

Dr. Ray urged feeders to pave their lots with concrete to "lift the cattle out of the mud and slime." He reported that Arkansas research has shown that solid footing is very profitable in feeding operations. The use of concrete-paved lots in eastern Arkansas would be extremely important, he said.

He said research men are also working on a project designed to determine if bedding should be used in feedlots.

"We had very little trouble at the Marianna station the first year with respiratory ailments," he reported. "But the troubles began to increase

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during the second year." He indicated that the bedding problem was being studied in connection with its use as one step toward the possible control of respiratory infections.

Summing up, he said that each prospective feeder should examine his own problems, property, farm program and feedlot possibilities before making a decision. "If you use your facilities to the best of your ability," he concluded, "I think you will make a profit with a feedlot."

"Arkansas Can Compete"

Dr. Lloyd Bender, department of agricultural economics and rural sociology, University of Arkansas, listed a number of reasons why feeding should be profitable in Arkansas.

He said Arkansas cattle feeders can compete favorably with those in other areas because they have a number of factors in their favor.

"The rate of gain in the North is not as great as the gain we obtain experimentally here. However, we need a pattern different from that of the Corn Belt. . . . We have an advantage of lower feeder calf prices. We need to substitute roughages for grain through a deferred feeding program. Our feeding programs would be much less standardized than those of other areas. Instead of being built around one single crop, they would be built around a number of different crops."

Research Results

Reporting on research by the Arkansas station, he said that cheaper gains were obtained from choice quality feeder calves on a 450-day deferred maximum roughage program than from the same quality of calves fed on a high-concentrate ration. He reported that one group of the calves was fed to the grade of choice with 3,000 lb. of corn and a maximum amount of roughages. The gains cost 12¢ a pound. The other group was fed 4,400 lb. of corn and a minimum amount of roughage. Its gains were placed at 15¢ a pound. Dr. Bender said comparable results were obtained with cattle grading good when marketed.

He emphasized that the difference in transportation costs will be an asset for Arkansas feeders. (Mr. Owen estimated that it costs Arkansas packers $1 cwt. to ship cattle here for slaughter from northern and midwestern markets.)

"Our location will give us a big advantage, enabling us to deal with Arkansas packers," he told the group.

Dr. Bender feels that Arkansas could receive prices comparable for the same grades of cattle sold on midwestern markets. "We know that our packers are out bidding actively for cattle," he said. "In 1958, 82% of the cattle slaughtered here were brought in from other areas because the local supply was not available. Arkansas packers have had to go out of the state consistently to obtain their supplies."

Quality Important

Bill Mitchell, a Little Rock meat merchandiser, and Henry Brown, a packing plant executive, agreed that the state's packers will purchase Arkansas-fed beef if it is of the quality they must have to meet market demands.

"There have been a lot of reports that we do not pay for Arkansas beef what we pay for out-of-state animals," Mr. Brown declared. "This may or may not be true, but we would like to suggest that farmers become acquainted with the operations of local packers."

He also discussed the packer-farmer relationship, saying barriers could be broken down if farmers would become better acquainted with packing plant operations and problems.

Arnold P. Monteith, general manager, Rath Packing Co., Ft. Smith, Ark., also discussed the possibilities of developing commercial feedlots in Arkansas.

Mr. Monteith said he believes there is an opportunity for commercial feedlots in the state if they are backed by good business practices.

Jimmie Ligon of Conway, an official of the Central Arkansas Production Credit Assn., told the conference that financing for feedlots can be obtained if producers base their operations on a sound foundation of business principles.

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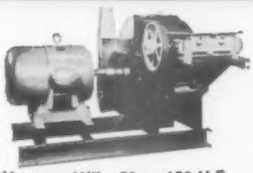
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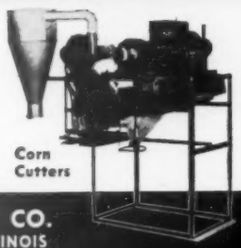
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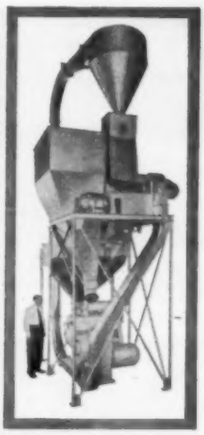

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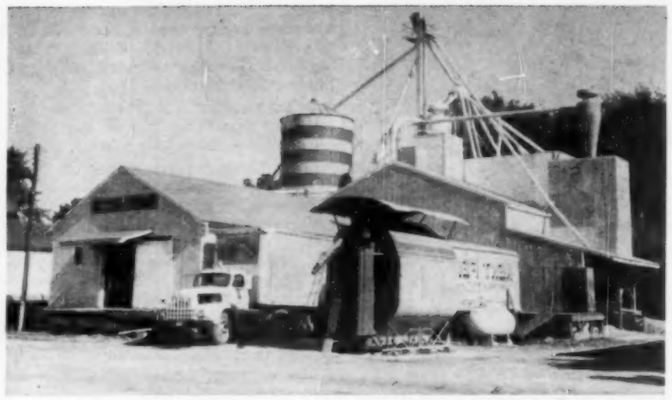


PARRISH FEED SERVICE—This view of the Parrish Feed Service, Osco, Ill., shows the mill, warehouse and the 17½-ton semi truck used to haul portable bins from the Kent Feeds Muscatine, Iowa, plant to Osco. Having many kinds of feed concentrates on hand has proved to be an advantage for the firm.

Illinois Firm Uses Portable Bins for Concentrates

By Al P. Nelson
Feedstuffs Special Writer

The ability to have many kinds of feed concentrates on hand, some for straight feeding with grains, and some for mixing with ground grain, can be an asset to a feed firm whose customers have wide feeding requirements for livestock and poultry.

In the case of Parrish Feed Service, Osco, Ill. (Kent dealership), owned and operated by Donald Welborn and Ralph Parrish, a large variety of concentrates can be stocked because these men have 19 custom made, steel portable bins of one-ton capacity each. The bins, 43 inches square, 6 ft. high and weighing 350 lb. when empty, are taken to the Kent Muscatine, Iowa, plant about three times a week in the Parrish 17½-ton semi trailer where they are filled and then hauled back the 55 miles to Osco.

About 10 of the one-ton bins are filled with concentrates, reports Mr. Parrish, and the others with complete feeds or other ingredients. When the semi trailer pulls up at the Parrish Feed Service dock, a Clark fork lift is used to take the bins out of the trailer and line them up in the nearby warehouse.

"We like this portable bin deal very much," says Mr. Parrish, "because we can get fresh concentrates in a wide variety regularly to satisfy our customers' needs. We figure it costs us about $2 in transportation costs per ton to get the concentrates, whereas, if we hired them delivered, the cost would be about $4 per ton."

For storing ingredients and grain, the firm has five one-ton bins and eight 14-ton capacity bins. Mr. Parrish makes a lot of hog feeds from Kent concentrates and so has two 10-ton bins over the drive which contain pig rations. At this spot there is also a 10-ton cracked corn bin, because there is a large demand for cracked corn in cattle rations. For temporary storage of grind and mix orders the firm also has two five-ton bins over the drive area.

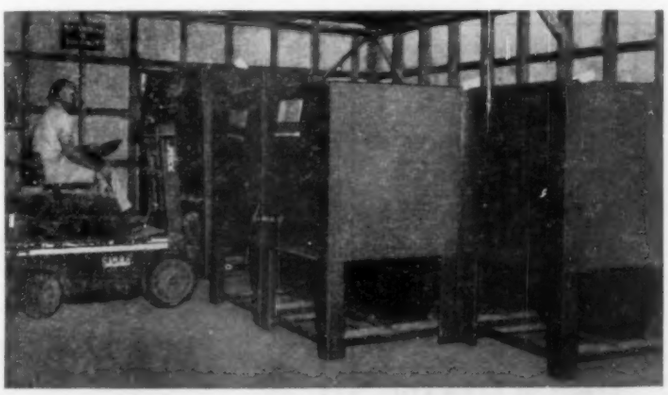
Several years ago Mr. Welborn and Mr. Parrish spent $65,000 modernizing the mill and installing new equipment. They have a Prater 100 h.p. hammermill, a four-ton Prater mixer and a two-ton Prater mixer, as well as a Prater portable molasses blender. In addition, there is a Roskamp corn cracker and a Roskamp oat huller.

There are two dump sinks in the big drive. One is for corn that goes to the Triumph sheller or the hammermill, the other for grain or ingredients into storage.

"We shell and crack a lot of corn and hull and roll a large quantity of oats," says Mr. Parrish. "We can run cracked corn from our holding bin directly into the mixer or into the weigh buggy."

A sign on the mill office wall shows how Mr. Welborn and Mr. Parrish stress the low cost of their quality feeds. It reads, "Use your own grain. Pig ration, less than $42 per ton. Includes grind and mix and super fortified with antibiotics and vitamins."

"We are constantly urging our hog and cattle customers to keep accurate records of their feeding costs," Mr. Parrish says. "When they do, they become better businessmen and



BIN HANDLING—Ralph Parrish, co-owner of Parrish Feed Service, Osco, Ill., is shown using a Clark fork lift truck for handling a portable bin. The firm has 19 custom made portable bins of one ton capacity each. They are filled at the Kent Feed Muscatine, Iowa, plant about once a week.

OWNERS—Donald Welborn, left, and Ralph Parrish talk over customer feeding records with an employee of the Parrish Feed Service, Osco, Ill., which they own. Records of sales aid the firm and customers.

know exactly what they are getting from the hog feeding operation. We have individual feed record cards on each customer, showing variations in what some customers order from time to time. In this way, anyone from the farm can phone us and, by consulting our cards, we know what the farmer wants, and if it's time to change the formula due to age and weight of pigs."

Parrish Feed Service has about 10,000 bu. grain storage and operates a limited grain bank plan. A drier is also used. The farmer is charged 1% for shrinkage and 1¢ per point for drying. There is no charge for grain storage. Mr. Parrish points out that his feed accounts use relatively large amounts of grain regularly which keeps individual grain bank storage accounts within control.

For delivering feed the firm uses a seven-ton Pakmaster bulk truck and also a four-ton Pamco bag and bulk combination unit. Customers get a bulk discount of $4 per ton. The firm charges 10¢ per cwt. for crack and mix. Grinding and mixing rates run from 12-16¢ per cwt., depending upon the screen size. Twenty-two cents per cwt. is charged for hulling oats.

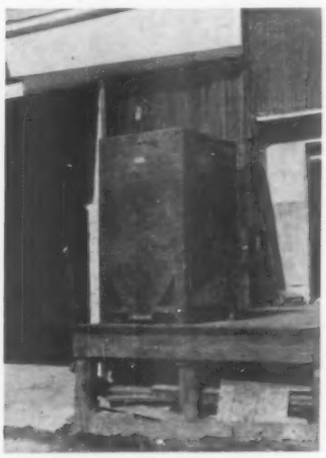
The firm has a total of nine vehicles. These include three pickup trucks, two bulk trucks, two box trucks, a jeep and a tractor. Maintenance of these vehicles is done by a part-time man. He is a rural mail carrier and his mail runs are usually finished at noon. Therefore, he is available six days a week to handle Parrish Feed Service fleet maintenance. This is done in a garage incorporated in the feed plant, part of which formerly housed a farm machinery service setup. The rural mail carrier is also available for making emergency feed and other deliveries.

"We are able to cut down our fleet service costs by this arrangement," says Mr. Parrish, "because we have all operation factors under control at all times."

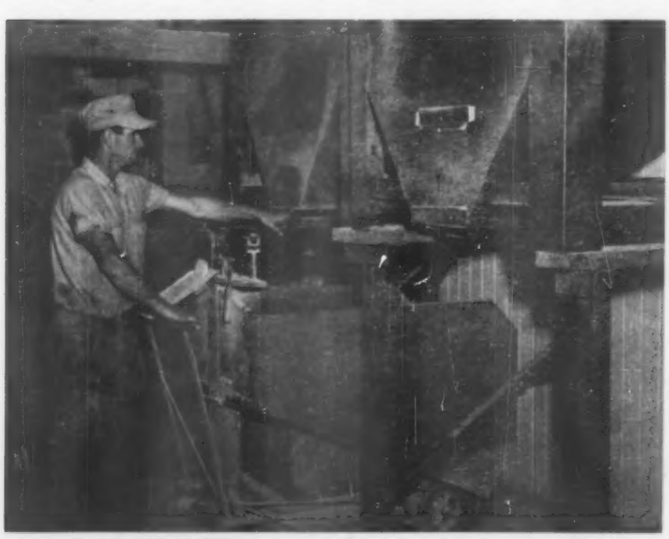
He says that Mr. Welborn and he like to give "excellent" service to customers. All orders are delivered the same day they are received, even if Mr. Welborn or Mr. Parrish has to make deliveries at night.

"Customers appreciate such prompt attention to their orders," Mr. Parrish says.

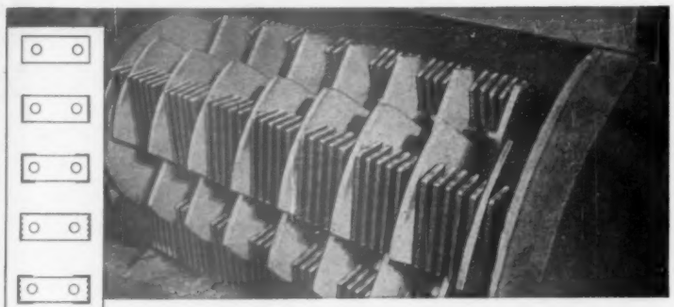
Many feed men dispense feeder education at larger meetings at local halls, or through outside salesmen. Mr. Parrish and Mr. Welborn take turns in doing some outside selling, aided by a Kent resale man. However, it is in the roomy farm store where a lot of feeder education takes place. Here Mr. Parrish and Mr. Welborn keep a large coffee urn going all day



PORTABLE BIN—One of the Parrish Feed Service's 19 one-ton portable bins is seen here on the mill loading platform. After being filled with concentrates, complete feeds or other ingredients at the Kent Feeds, Muscatine, Iowa, plant once a week, the bins are unloaded from the firm's semi truck with a fork lift truck and are stored in the nearby warehouse.



DRAWS INGREDIENTS—In a photo taken inside a Parrish Feed Service mill, an employee is seen drawing ingredients into a weigh buggy.



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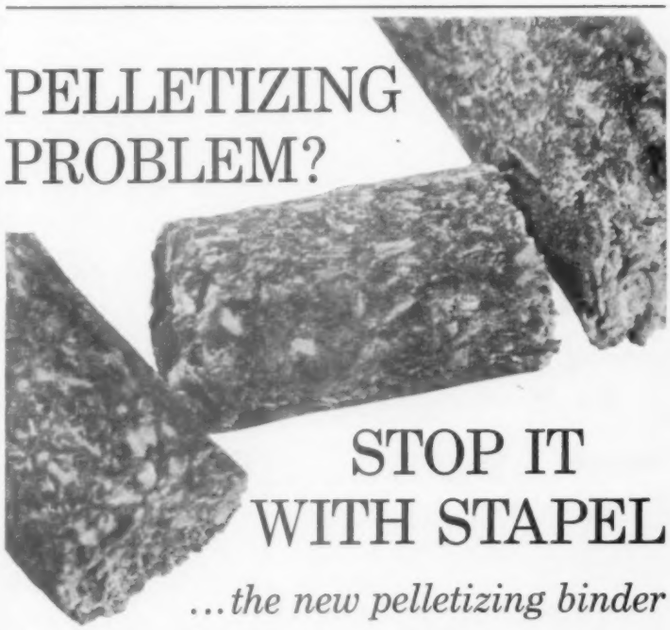

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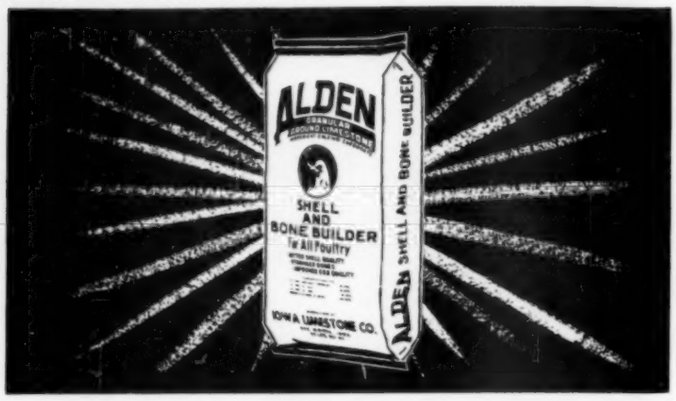

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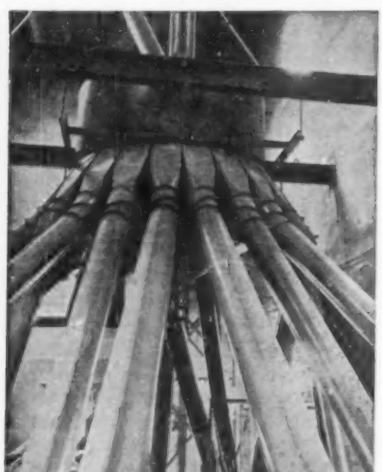

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It is a well known fact that if you give a farmer a steaming cup of aromatic, fine-tasting coffee, and a comfortable chair to sit in, he will stay around awhile, feel at home and loosen up and talk about his feed and other problems. Sometimes five to eight farmers will gather with Mr. Parrish and Mr. Welborn around this table, sip coffee and get down to profitable feed economics.

"It is one of the best goodwill building ideas we use," says Mr. Parrish. "I have yet to find a customer who doesn't like coffee."

Biologist Proposes Nuclear 'Noah's Ark' For Plants, Animals

ATLANTA — What would happen to the feed business if all-out atomic warfare suddenly burst loose and mankind managed, someway, to survive?

Man has concerned himself with preservation of his own hide, giving little thought to the fact that he might not be able to subsist for lack of meat and vegetable life in the event of a radioactive catastrophe.

At a recent world's first symposium of radioecology in Colorado, a scientist from Georgia broached the subject.

Dr. Robert B. Platt, a biology professor at Emory University, said that immediate steps must be taken to insure re-establishment of natural environment—in plant and animal life —after such an occurrence.

Most research, he said, has concentrated on the effects of radiation on man, but when it comes to cows, sheep and chickens, little is known.

More startling was his reminder that if animals do manage to survive such an attack, or fallout, they would still have to live on contaminated feed and grass.

Dr. Platt said that since man is dependent on his environment for food, not much has been accomplished in finding ways to protect animals and plants. Little thought has been given to providing uncontaminated feeds for livestock.

Furthermore, the scientific world, he says, doesn't know the whole body radiation sensitivity of more than one or two large mammals.

"Nuclear Noah's Ark"

Dr. Platt, who has been conducting tests in radioactivity, has proposed the establishment of a modern "nuclear-age Noah's Ark."

After science has conducted tests to ascertain animal radiation sensitivity, and an inventory has been compiled, including plant life, there should be constructed a means of shielding vital members of man's biological economy, he said.

Such a shield could be in a nuclear submarine beneath the surface of the ocean, or in abandoned underground mines.

Here would be placed reproductive units of plants and animals which man must have to exist, he said.

"For plants, that would include seed, bulbs and for animals, eggs and sperm when possible or, when necessary, the entire animals," he said.

Emory University has already been conducting tests on the campus and at a reactor near Dawsonville in the mountains of north Georgia. At the latter tests have been run on the sensitivity of trees and other vegetation.

Dr. Platt holds that the historical approach to recovery, which dictates that nature will repair its losses, is not practical in the face of thermonuclear war. There could be a change in current patterns of plant and animal development. If most, or all, mammals should be wiped out, it would bring about a drastic change in the diet of the people surviving, he said.

Feed to Hong Kong Up

SAN FRANCISCO — A heavy increase in export of poultry feeds to Hong Kong is reported by Harry M. Stevenson, who handles trading for the Thos. D. Stevenson & Sons, grain importing and exporting firm here.

As a matter of fact, according to the grain official, demand for the firm's poultry feed line has practically doubled in recent months. He said that he is receiving "larger and larger orders" from the mushrooming poultry industry now springing up in the open farm country near Hong Kong.

"Many people think of Hong Kong only as a city and don't realize that there is a huge farming area nearby," Mr. Stevenson said. "The new poultry industry is really booming there because the flow of poultry and eggs from Red China stopped when that nation began having severe grain shortages.

"Consequently we have been shipping great quantities of poultry mixes out of San Francisco to be handled in Hong Kong by our British distributor," Mr. Stevenson said. "And, at this time it looks like we'll be shipping even more in the near future."

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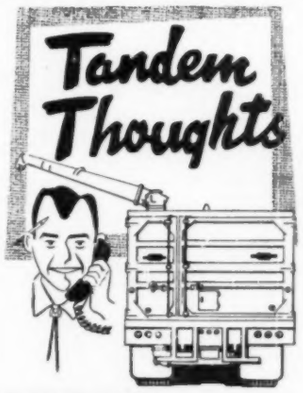

BY ROBERT MORITZ
WILSON TRAILER COMPANY

WILSON PUT THE "BELT" IN CORN BELT

SIOUX CITY—This great Upper Midwest is known both as the nation's "Corn Belt" and its "Grain Belt." Astute observers are quick to note the similarity in the two toponymies: "Belt"! The Wilson wag was heard to comment that this is an obvious tribute to the Wilson "Auger-Belt" grain trailer.

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The

OUTLOOK

From the
SWINE
Point of View

Pork Production Future Looks Sound, But Basic Problems Need Attention

By John L. Richardson
Allied Mills, Inc.

Most economists and market analysts seem in agreement that hogs may be the most profitable type of livestock enterprise on American farms in 1962. Some are even predicting very stable profit prospects from pork production over the next 10 years. This all sounds especially interesting in the wake of the unhappy broiler and turkey market situation of 1961.

Present indications point toward a moderate increase in 1962 hog production with the 1961 fall pig crop only 2 to 3% over last fall and early spring 1962 farrowings forecast at about 4% over previous year. Hog slaughter has been heavy during past four months, and, with more hogs on hand and slightly heavier farrowings in prospect, it follows marketings may still be heavier most of next year. This calls for careful supply-demand analysis and planning at all times to forestall damaging effects of overproduction. It would not take much expansion in production from present levels to cause sharply lower market prices.

Despite a 7% larger pig crop in the spring of 1961, hog producers enjoyed relatively favorable prices until November and, even then, prices did not drop as much as expected during November and December, only about $1 to $1.50 per hundredweight below last year. With only a 3 to 4% increase in production, hog prices early in 1962 may be higher than last spring and may average only slightly less for the entire year. However, higher corn and soybean meal prices probably will result in lower feeding profits.

Production Leveling Out

It is most encouraging that hog producers with but very little inclination toward integration and without government controls have demonstrated that they can voluntarily hold a sound course founded upon the free operation of the law of supply and demand. With multiple year-around farrowing, hog production seems to be levelling out somewhat with shorter cycles and market peaks and valleys less accentuated. Hog producers seem to have become more responsive to the hog-corn ratio during recent years, adjusting more quickly when it is not favorable. If the present favorable ratio continues, production may step up noticeably the last half of 1962, bringing lower hog prices. However, the higher government loan rate on corn may discourage any decided increase of production of hogs during the coming year. Efficiency in production rather than increased production should be the watch-word in 1962.

Even though there are large commercial type hog production units springing up in various parts of the country and many farm production units are being increased in size, the family farm remains the dominant factor in pork production in the Midwest corn-hog area. These farms are specializing, modernizing, mechanizing and taking full advantage of scientific and technological progress for improving efficiency in production. In many cases, family farms are now producing about as many hogs as they can handle with available labor and capital. Some highly integrated hog production projects are to be found in the South and in other areas, but are not influencing the over-all hog market in any alarming manner to date.

Problems to Be Recognized

It seems to this writer that, even though the future for pork production looks sound and encouraging, there are four very definite problems that should be recognized.

First, of course, is the necessity of the continuation of efforts toward efficiency of production which includes proper full-cycle feeding, modernized management, expanded materials handling and improved breeding.

The large-scale pork producer of this era cannot afford to take chances on any feeding program that does not enable him to consistently produce large, uniform litters of strong sturdy pigs that can be put on the market at 200 to 225 lb. in five months or less with not more than 10% mortality. Probably the most neglected periods in the feeding cycle are the improper nourishment of gilts and sows in the breeding herd, the poor conditioning for farrowing and the improper nutrition for the sow and litter after farrowing up until the pigs weigh 40 to 50 lb. each. Most producers do a satisfactory job from this age to marketing. There is no reason for neglect during these periods mentioned because highly nutritious rations, properly fortified and medicated, for each stage of development are available and will help reduce unnecessary pig losses which, in the past, have contributed to unnecessary inefficiency.

In regard to feeding practices in general, it seems that the trend toward on-the-farm mixing has slowed up a great deal and, in some cases, has actually swung back the other way. Some large producers have found that they can use their limited labor supply and capital to better advantage in other phases of breeding and management and depend on the greatly improved services of the modern, progressive feed dealer for their feed supply. In the great grain-hog producing areas with abundant corn crops, the use of high protein concentrates is continuing to increase. But, in this connection, exacting record-keepers find that the concentrates and grains should be mixed and fed as a complete ration rather than free choice. A series of tests at the Wayne Research Farm have shown that hogs gained 12 to 16% faster and required 5 to 7% less feed for gain when corn was ground fine compared to a relatively coarse grind.

Great strides are taking place in management practices which include bulk handling of feed, erection of feeding floors and sheds with proper waste disposal, and elimination or reduction of disease hazards, all of which make for labor efficiency and cost reduction. Not always are these improvements made just for the purpose of increasing production, but rather to enable less labor input to handle approximately the same number of hogs.

Consumption Decline

The second major problem facing the pork production industry at this time is the necessity to stop the great reduction in per capita consumption of pork. According to U.S. Department of Agriculture figures, the per capita consumption of pork in the U.S. in 1951 was 71.9 lb. while the preliminary estimate for 1961 is only 63.5 lb. In the same period, beef consumption increased from 56.1 lb. to 86.7 lb.; and the consumption of poultry meat increased from 26.1 lb. to 37.5 lb.

This is a real challenge to the pork industry but is one that can be met to a large degree by putting greater emphasis on the production of a more desirable type of pork carcass. Breeders are making significant progress in developing meat type hogs that can make more rapid gains on less feed and produce a carcass more acceptable and appealing to the consumer than in the past. This is urgently needed to retain or regain pork's rightful share of the total meat market. True meat type hogs return a premium to their owners long before they get to market. Long, meaty sows generally have larger litters, produce more milk and give pigs a faster start. Meat type hogs convert feed more efficiently because it takes more energy to produce fat gains than lean gains. However, it requires rations containing enough protein of proper quality to build lean meat.

The breeding of crossbred meat type hogs at the Wayne Research Farm is typical of what is possible for every swine producer. On this farm, hogs are bred for meatiness and fed for utmost efficiency in feed conversion. Proper feeding will allow a hog bred for meatiness to take full advantage of inherited ability and gain faster on less feed than ones bred for fat production.

Production of meat type hogs pays off at the market place, too. During the first six months of 1961, the average price received on the Chicago market from 10 marketings of hogs from this farm was $18.50 per hundredweight. This was 90¢ per hundredweight more than the average price for the bulk of the hogs sold at the same weights on the same days. This is rather conclusive proof that the market will pay a premium for meat type hogs. When more hogs of this type are produced, a steady premium market will be easier to establish. Packers will be justified in paying higher prices and in promoting a superior product to create a bigger consumer demand. Thus, it is hoped that faster progress will be made in breeding a much higher percentage of meat type hogs in the near future.

Swine Diseases

A third serious problem confronting the swine industry is that of preventing, controlling and eradicating swine diseases that are dissipating millions of potential pork profits every year. Not only do diseases reduce profits by causing unnecessary death losses, inefficient gains and poor quality pork products, they also stand in the way of broadening demand for pork products through export sales. It is said that many foreign countries would readily accept our pork products but are afraid they might bring hog cholera into their breeding herds. Because of the seriousness of this problem, several states

John L. Richardson

AUTHOR—Mr. Richardson, the author of the accompanying article on the swine outlook, is a native of Indiana. He received his B.S.A. degree in animal husbandry from Purdue University and an M.S.A. degree in agricultural economics at Purdue. He did additional graduate work in business administration at the University of Minnesota. He owned a feed store and custom mix mill in Iowa and a feed store and hatchery in Indiana. Presently he owns a livestock farm in Indiana producing commercial hogs and breeding purebred Polled Shorthorn cattle. He was with the U.S. Department of Agriculture Information Service for three years. He joined the staff of Allied Mills in 1929 and has held the following positions with Allied: Assistant advertising manager, district sales manager, director of advertising and sales promotion, director of marketing, and currently, public relations and promotion manager.

WAYNE SWINE RESEARCH—The new feeding floor pens at the Allied Mills, Inc., Wayne Research Farm, Libertyville, Ill., are shown above. About 2,000 hogs are marketed annually after they have been used in nutrition studies at the farm and consistently bring premium prices on the Chicago market, the company reports.

FISH MEAL UPS GAINS IN TEST WITH STEERS

VANCOUVER, B.C.—Good results have been reported in a University of British Columbia steer feeding trial using a non-roughage diet including rolled wheat, fish meal and vitamin A.

The Fisheries Council of Canada says that the test is notable because of high rates of gain by the steers and because of the use of fish meal in the ration. Dr. A. J. Wood of the university's faculty is conducting the experimental work, it was noted.

The council states that previous tests made with protein other than fish meal did not produce the same rates of gain.

with the help of federal agencies are undertaking far-reaching programs to eradicate hog cholera as well as swine brucellosis. Research with specific pathogen free pigs continues at educational and commercial laboratories as a means of studying disease prevention. There are many problems yet to be solved in this program, but it seems to hold promise in helping to improve pork production efficiency.

Balancing Supply and Demand

Now, a fourth problem which has not received enough emphasis up to date but which, in the face of the debacle of the broiler, turkey and egg markets, should be apparent and significant to all feed people as well as to swine producers. This is what the writer would call "responsibility in helping plan supply in terms of demand" without the necessity of government intervention.

As stated earlier, hog farmers have already demonstrated unusual ability to voluntarily adjust production rather quickly under the free operation of the law of supply and demand. Feed dealers, feed companies and feed trade associations should make every effort to encourage hog producers to be ever alert to changes in the trends in relation to supply and demand and adjust production accordingly. Working with swine associations and other suppliers, feed people should not encourage practices that will result in over-production but should, instead, at all times, emphasize careful planning of supply in terms of demand. In this way, they can help their hog feed customers maintain satisfactory market prices and enjoy the fruits of their labors in improving production efficiencies and in breeding the type of hogs that will satisfy and expand consumer demand.

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Egg Producers See Threat in Turkey Marketing Orders

NEW YORK—Members of the U.S. Poultry & Egg Producers Assn., Inc., were told at a meeting here that national marketing orders for turkeys and turkey hatching eggs were "replete with danger for the producers of table eggs."

The speaker, Calvin C. Baldwin, Washington representative for the association, indicated that the U.S. Department of Agriculture is in the process of forming an egg industry advisory council. He said this group, similar to a council now being shaped by this agency for broilers, would aid the government in studying and seeking regulatory legislation, if necessary, for the egg industry.

Mr. Baldwin also pointed out that it appears that some "controls on the setting of broiler hatching eggs are in the offing. This would give rise to the possibility that broilermen and hatcheries now engaged in meat bird operation could very easily funnel their surplus eggs into the pipelines of table eggs.

"It is easy to imagine what harmful effect this would have on egg producers, particularly the small, family-owned operation."

Jerome Taub, Bound Brook, N.J., president of the association, said that "unless egg producers are also brought under national marketing orders, it may also spell doom for those still remaining as independent operators."

MINIMUM LOAD SET

SAN FRANCISCO—Truck hauling rates in California on packaged and bulk grain and rice will be based on a 48,000 lb. minimum load instead of the former 40,000 lb. figure.

Agreement on the new minimum was reached at a meeting of the Grain Exchange, the California Hay, Grain & Feed Dealers Assn., and the California Trucking Assn.

North Dakota Turkey Group Against Orders

FARGO, N.D.—A straw vote of members of the North Dakota Turkey Federation attending the North Dakota Poultry Industries Convention here, showed 62% against any marketing order for the turkey industry.

The group also elected officers during the two-day convention. Lloyd Nelson, Valley City, was elected president. He succeeds B. J. Duke, also of Valley City, who became a member of the board of directors.

Other officers named were: First vice president, Anno Van Oosting, Hensler; second vice president, Bill Keup, Mohall; third vice president, William Knauss, Tolna; reelected secretary-treasurer, Art Lanz, Devils Lake, and renamed executive secretary, Irving J. Mork, Fargo.

More than 275 turkey men, egg producers and feed men were registered for the convention.

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Putting Research To Work

BY SPENCER H. MORRISON, PH.D., D. V. M.

Elimination of Pink Whites Discoloration in Stored Eggs from Hens Fed Treated Cottonseed Meal or Sterculic Acid

● A. J. Deutschman, B. L. Reid, H. W. Kircher and A. A. Kurnick, University of Arizona, Poultry Science, Vol. 40, No. 5, pp. 1305-1310, September, 1961.

ABSTRACT AND COMMENT

A tentative approach has been made towards solving the problem of feeding cottonseed meal to laying hens. As most of us already know, when cottonseed meal is fed in very large amounts (over 5 to 10% of the complete diet, generally) discoloration of egg yolks and/or development of pink whites occurs in a large proportion of shell eggs when stored. This has greatly limited the use of cottonseed meals in laying hen rations. Various attempts have been made to produce meals of low gossypol content and methods of testing these meals for ability to produce discolored eggs and yolks have been devised (King et al., 1961; Phelps, 1961; Frampton, 1961; Boggs et al., 1960; McMichael, 1959; etc.). Until now no really good method has been developed which offers real commercial possibilities, without at least some of the field problems occurring.

A method has been developed by the Arizona group which seems to offer real promise. Various methods of treating the cottonseed meals were used utilizing various gases and combinations of gases on 12½ lb. samples of the meal placed in tubes of polyethylene.

It was shown that the treatment of cottonseed meal under a gas atmosphere of either SO_2 (sulfur dioxide) or HCl (hydrogen chloride gas) for 24 hours at room temperatures would completely prevent pink whites or gossypol discolored yolks in eggs stored for more than three months when hens were fed the treated cottonseed meals. Obviously, such experimental methods are not well adapted to commercial practice, but it is a foundation which offers much hope of solving a serious problem. It is not unreasonable to guess that gas treatment processing methods will be quickly developed.

●

Timely and Worth Noting

It was mentioned at the recent Cornell Nutrition Conference by Dr. M. L. Scott that the vitamin requirements of poultry in good health were considerably below those affected with various disease and/or stress levels (see Proc. 1961 Cornell Nutrition Conference, pp. 42-44). Two important papers have just been published concerning the vitamin A requirements for poultry which are must reading for most feedmen. However, they must be tempered in light of Dr. Scott's report and recommendations.

The papers are published in the September, 1961, issue of Poultry Science (Vol. 40, No. 5) and are entitled as follows:

(1) "Reinvestigation of the Vitamin A Requirements of Laying and Breeding Hens and Their Progeny," F. W. Hill, M. L. Scott, L. C. Norris and G. F. Heuser, Cornell University, (pp. 1245-1254).

(2) "The Vitamin A Requirements of Breeding Turkeys and Their Progeny," G. S. Stoewsand and M. L. Scott, Cornell University (pp. 1255-1262).

Briefly, the first paper showed that the absolute **minimum** requirements of laying hens for maximum egg production, maintenance of body weight and health, and for a minimum of the blood spotting defect was 1200 to 1600 U.S.P. units of vitamin A per pound of diet. It must be emphasized that this requirement is based upon the presence in the diet of stabilized forms of vitamin A. Thus, this requirement is less than reported in most other experiments investigating vitamin A levels for hens. (The product used in this investigation was Rovimix-A-325, Hoffmann La Roche). By inference it can be concluded that the above vitamin A level from a stabilized source is also o.k. for breeding hens.

When breeding hens receive at least 1200 U.S.P. units per pound of diet, it was also demonstrated that chicks had normal growth and development when supplied with 600 U.S.P. units per pound of diet of vitamin A in a stabilized form.

The second paper has furnished us with much food for thought regarding vitamin A levels for turkeys. First of all, it was shown that the turkey breeder hen's requirements are probably lower than previously suspected and appear to be in the neighborhood of 1200 U.S.P. units per pound when a stable source is used. This is much less than most have previously reported. It should be pointed out, however, that if the vitamin A content and the carryover of the poults are considered, 4800 U.S.P. units per pound from a stable source were required to maintain high levels in eggs and poults over a prolonged period. Poults hatched from breeding hens maintained on a 4800 U.S.P. per pound level could survive and grow normally on marginal levels of vitamin A in the starting diet. Thus, from a practical standpoint, we are probably speaking of a minimum requirement of 4800 U.S.P. units of stable vitamin A per pound of diet for turkey breeder hens.

Although 800 U.S.P. units of stabilized vitamin A per pound of diet were required for normal growth and feed efficiency of poults from hens receiving 1600 U.S.P. units or more of vitamin A per pound of turkey breeder diet, a level of 2400 U.S.P. units of vitamin A per pound of starter diet was needed in order for the poults to produce satisfactory vitamin A liver storage values and minimum blood uric acid levels.

Since poults require more vitamin A than do chicks and also since poults are fed higher protein starting rations, it is logical to suspect that a higher protein level in the ration increases the need for vitamin A. Other work, largely unreported as yet, tends to confirm the fact that such a relationship exists.

Aeration Report

CHICAGO—Effective methods of using aeration systems to maintain the market quality of stored grain in the hard winter wheat area are described in a report released by the U.S. Department of Agriculture.

USDA and Kansas agricultural experiment station researchers tested different types of aeration systems and different airflow rates in both upright and flat storages.

The report includes temperature and relative humidity limits for each season and the approximate time fans must be operated to cool a bin of stored grain, in addition to other information. A free copy of the report, No. 480, can be obtained from the Office of Information, USDA, Washington 25, D.C.

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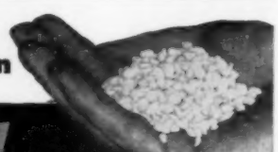

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LOWEST COST CALCIUM SUPPLEMENT FOR LAYING HENS—DOES A GOOD GRIT JOB, TOO.

Shellmaker is produced from high calcium limestone formed millions of years ago from shell and other calcareous deposits under the sea that one time covered the entire land area now known as the Mississippi River basin.

Shellmaker is slowly soluble in the gizzard to supply most effectively all the extra calcium the hen needs for building strong egg shells. It is also hard enough to do a good grit job as shown in feeding trials at several state experiment stations.

Write for information and prices today.

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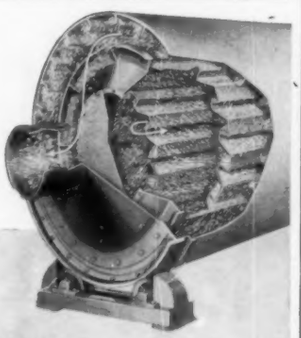
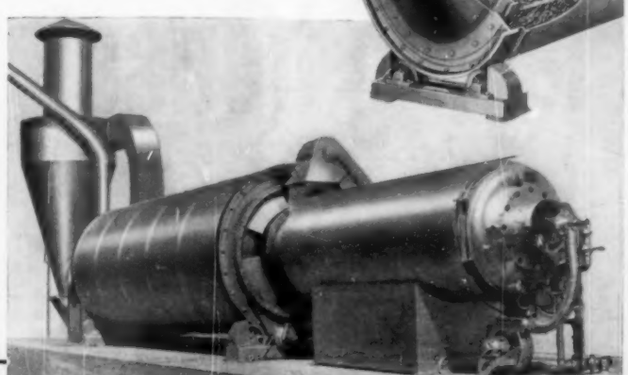
NEW '62 HEIL DRYERS!

15% more production with no fuel increase
25% more production with modest fuel increase



New 1962 Heil dryers are more efficient than ever. With greatly improved utilization of the drying medium, you can dry 15 percent more material with no increase in fuel consumption — 25 percent more with only a modest increase in fuel.

For over 30 years, Heil dryers have been the standard of comparison—in fuel economy, effectiveness of drying, quality of finished product and compact construction. Now — for '62 — you get a better value than ever! Wire, write or call for the complete story.



THE HEIL CO.

MANUFACTURERS OF THE ARNOLD DRYER

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PUT GUARANTEED POTENCY RESULTS INTO YOUR OWN FEEDS AT LOW COST!

JERSEE VITAL-MIN HAS NEVER FAILED TO GIVE GUARANTEED POTENCY RESULTS!

Contains the necessary Vitamins, Antibiotics, Amino Acids and Trace Minerals to Vitamin Fortify your own feeds for just a few cents a bag . . . JERSEE VITAL-MIN makes your feeds better, brings you more satisfied customers.

CAF-SUPP

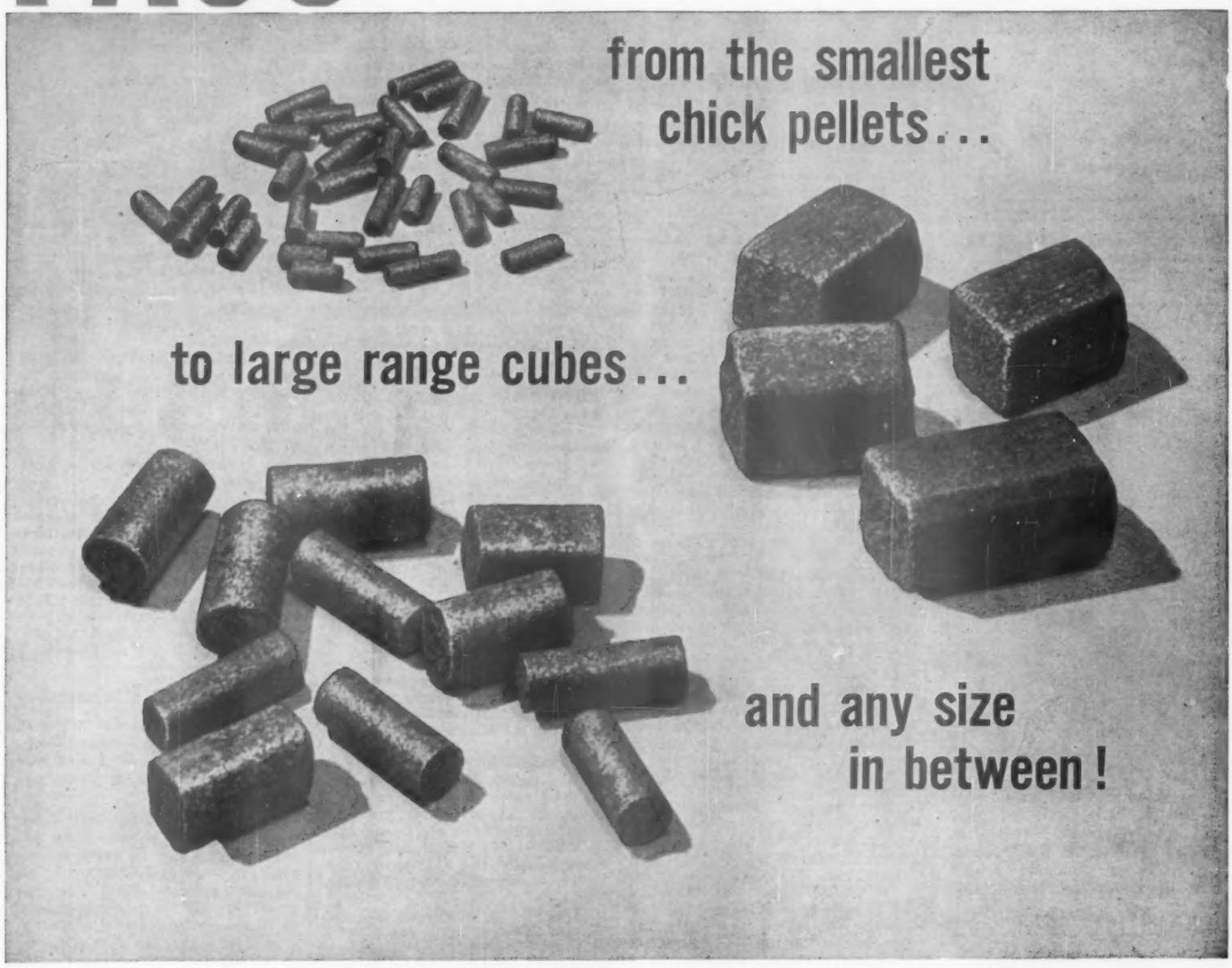
Contains guaranteed levels of Vitamin A, Vitamin D and Aureomycin. Guaranteed feeding results.

Write today for dealers' sales helps. Jobber and distributor franchises are available!

THE JERSEE CO. MINNEAPOLIS, MINN.

Use FEEDSTUFFS Want Ads for RESULTS

PACO makes Pellets best!



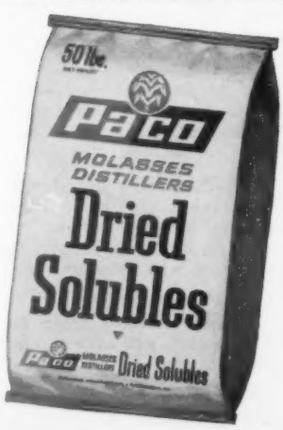
Pellets made with Paco mean repeat business, because Paco-ized pellets are entirely different from any other pellet.

Paco is a feed ingredient in itself, supplies plenty of essential nutrients for greater feed conversion and productivity. Its rich, molasses flavor adds palatability to all types of pelletized feed.

"Fines" are a thing of the past with Paco, because pellets form better and hold their shape until they are fed! That means less waste that normally increases feeding costs. Paco-ized pellets are glossy, slick in appearance, hold down choking dust in cattle feeds.

You can use Paco with confidence. Once customers see, smell and experience the goodness of Paco-ized pellets, once they watch meat, milk or egg production go up—you're in for additional business.

Get Paco, packed in convenient-to-use 50-lb. bags. Write us for information on pelleting and farm uses of Paco.



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Mr. Allan G. Duey of Rowley Feed & Farm Supplies, Inc., Hebron, Nebraska, writes in part: "We would like to compliment you on the 9 x 24 Double Duty Grain Roller Mill.

"The roller mill will run through about 800 bushels of corn or milo per hour with ease. The space it requires is small and we find it very adequate in our business.

"If at any time you would like to send prospects to see this fine set-up please feel free to do so."

Mr. Duey also noted that business has picked up since the roller mill was installed because he can now supply the customers who wanted rolled feed.

Are you missing sales because you do not have a roller mill?

Make sure you can supply your customers the kind of feed they want. Order a Roskamp Grain Roller Mill with the guaranteed solid white iron rolls. Made in 8 sizes, there is one to fit your needs.

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HULLER MFG. CO.
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JOE BROOKS

BY AL P. NELSON

The County Agent Provides Valuable Help

It was snowing that morning when Joe Brooks walked down the street to the new, three story stone courthouse of Douglas County. He entered the wide, well lighted first floor corridor and approached the automatic elevator. When he pressed the button, a red light showed. A few seconds later the metal door opened smoothly, quietly and Joe stepped inside.

Moments later Joe was on the third floor, walking down a wide corridor toward the county agent's office. As Joe went down the long corridor, he thought how well lighted and cheerful this new building was, and how pleasant it must be for employees to work here. Certainly the new courthouse cost a lot of money—Joe recalled the fight over appropriation for it—but such a building would last for 50 years and pay out in the long run.

Now Joe stepped into a suite of offices which were the headquarters of Bill Mackenzie, the heavy set county agent who had once been a college fullback. The outer office, where Joe now stood, was in charge of a middle-aged, redhaired woman, and the walls of the area were lined with neat, wooden tilting shelves in which booklets were displayed with the words, "FREE—TAKE SOME," on a wooden sign. The booklets were on subjects from raising blackberries to spraying for Dutch elm disease.

"Hi, Joe!" called Mr. Mackenzie from his open office. He sat at his desk checking mail. "Come in."

Joe smiled and entered the county agent's office. The two men shook hands. It was evident that they were friends.

"Well, Joe," grinned Mr. Mackenzie, "this is a pleasant surprise. I've been to your mill a lot of times, but you don't come here very often. What's the matter with a county agent—is he off bounds for feed men?"

Both men laughed uproariously.

"You're not off bounds, Bill, but I do think that we feed dealers are a little afraid of county agents," Joe chuckled. "I suppose we sort of feel that you are agin most types of commercial feed. But you've certainly never given us cause to think that."

Mr. Mackenzie leaned back in his chair. "Oh, I suppose there is some of that feeling around among dealers. But not with me, Joe. I have seen too many cases where commercial feed is doing a wonderful job for progressive farmers. The only thing I'm concerned with is to get farmers to use as much of their home grown grains as possible in a ration and to do it as economically as possible. And I'm also on guard against the high flying feed salesmen who go around promising the moon to farmers if they buy their feed. You know what I mean?"

Joe nodded. "I do. But you won't find too many of them in this county."

"That's right. Most feed men are reliable. Joe, when I took over this job three years ago, the first thing I did was to visit every feed and fertilizer dealer in the county. I wanted to get acquainted with them and see if we could work together for the benefit of the farmer. And I've had good results."

"I know you have," Joe said, "and it was a good thing to do. Dealers in our club are always glad to help you put on a farm event or demonstration."

Mr. Mackenzie grinned. "And they also post all my notices about farm meetings and things like that. They are in touch with farmers and, Joe, this publicity helps our department. I appreciate it."

"It helps us, too," Joe said, "for quite a few of us attend those meetings, and we learn plenty of things that help us in running our businesses, so we can meet the needs of the farmers better."

Mr. Mackenzie nodded. "I'm glad to hear you say that, Joe. We are not going to see eye to eye on everything relating to farming, just as a husband doesn't see eye to eye with his wife on all matters—but on the whole we can work together on most things. I wish more country dealers would visit me."

"They'd learn something," Joe said. "Like I did a moment ago. I never knew you had so many booklets on farming for farmers to get. I'm going to put a mention of that in my next mimeographed bulletin. More farmers should know that."

"Thanks, Joe. And speaking of bulletins, you've got a dandy. I particularly like that twice a month market report. I keep track of prices pretty well with it."

"It's been well received," Joe smiled, "and that leads me up to something else for the bulletin. Bill, I'm going to do a series of interviews for my bulletin with the agricultural leaders of the county where I do business. I'd like to start out with the county agent. How about it?"

Mr. Mackenzie looked pleased. "Well, I'd be glad to cooperate. Tell me what you want."

Joe chuckled. "I want a story that will run about a page in the bulletin. I want to know where you were born, where you went to school, what are your main interests, when you got interested in agriculture, and a resume of the things you do as county agent. And if you want, I'll even list your girl friends — before marriage, of course—if you want me to, and if there is room."

Mr. Mackenzie burst into laughter. "Say, Joe, you're real generous. I'll buy your offerings, but let's skip the list of girl friends. I've got a lovely wife, and she just might not understand."

Joe grinned. "I know. I'd have the same reservations."

Mr. Mackenzie shuffled his papers. "Joe, I do think that you have a swell idea on these writeups of agricultural leaders. This will be the sort of thing where all of us can get to know more about others and their agricultural projects. I predict your series will be well read. Congratulations on the idea. Get out that notebook and pencil and start shooting me questions."

Pellet Plant Planned

ELTOPIA, WASH. — A group of farmers in Franklin County, Wash., has purchased 84 acres of land near Eltopia as a site for an alfalfa pelleting plant.

Fred Holmes, Eltopia, who heads the group, stated that one of the reasons for building the plant is that Japanese feed mixers are paying $60 ton for imported alfalfa. "At that price," he said, "a pelleting plant in the Basin can compete."

Mr. Holmes pointed out that, while there are no immediate markets open, the Portland Dock Commission is working with the U.S. Department of Agriculture in looking for possibilities.

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DPi has been a primary producer of vitamin A for a long time, was first to synthesize it commercially in this country, produces vitamin A in a modern plant using methods and processes developed in DPi laboratories.

Palmitate This is an inherently more stable form of vitamin A. It resists the effects of heat, moisture, and long storage. Testing vitamin A palmitate and the other commercial ester, vitamin A acetate, in stored feeds and premixes, we typically find 25% or better stability for the palmitate than for the acetate.

Gelatin is the most effective substance we have found for protecting vitamin A against air and minerals. Its digestibility makes the vitamin quickly available to the bird or animal.

250,000 The vitamin A potency of PGB-250 is 250,000 units per gram. You can also get potencies of 30,000, 20,000, or 10,000 units per gram. The diluent used in these dilutions is solvent-extracted soybean feed of particle size range especially chosen to blend with PGB-250.

You can get **PGB-250** *Dry Vitamin A* in 25-pound and 100-pound drums directly from us or from distributors throughout the country. For further information or a quotation, write *Distillation Products Industries,* Rochester 3, N. Y. Sales offices: New York and Chicago • Charles Albert Smith Limited, Montreal and Toronto.

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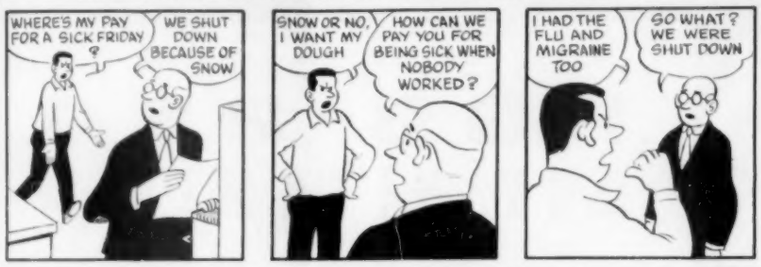
Latest Rulings in Labor Relations

WHAT ABOUT SICK PAY WHEN WEATHER SHUTS THE OFFICE ?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ARBITRATOR'S DECISION

YES, A PLANT OR OFFICE CLOSING IS IRRELEVANT TO SICK PAY

Based on a 1961 New Jersey decision

CALENDAR

(Continued from page 34)

Assn.; Stardust Hotel, Las Vegas, Nev.; Joseph Chrisman, 430 Board of Trade Bldg., Kansas City 5, Mo.

Feb. 9-11 — Poultry Fact Finding Conference; sponsored by Institute of American Poultry Industries; Municipal Auditorium, Kansas City, Mo.; pres., Harold M. Williams, 67 E. Madison, Chicago 2, Ill.

Feb. 12 - 13 — Montana Nutrition Conference; Montana State College, Bozeman; chm., Dr. O. O. Thomas, Animal Industry and Range Management Dept.

Feb. 14-15—Pacific Northwest Feed Mill Production School; Benjamin Franklin Hotel, Seattle; sponsored by Washington State Feed Assn.; mgr., John G. Wilson, 814 Second Ave. Bldg., Seattle 4.

Feb. 15-16 — Utah Feed Manufacturers & Dealers Assn. Annual Nutrition Conference and Meeting; The Newhouse Hotel, Salt Lake City; sec., Dr. Lawrence Morris, Brigham Young University, Provo.

Feb. 16 — Washington State Feed Assn. annual convention; Benjamin Franklin Hotel, Seattle; mgr., John G. Wilson, 814 Second Ave. Bldg., Seattle 4.

Feb. 18-20 — Ohio Grain & Feed Dealers Assn.; Commodore Perry Hotel, Toledo; sec., George G. Greenleaf, P.O. Box 151, Worthington.

Feb. 20 - 21 — Virginia State Feed Convention and Nutrition Conference; Hotel Roanoke, Roanoke, Va.; sec., Virginia State Feed Assn., J. Paul Williams, 615 E. Franklin St., Richmond 19, or Prof. Paul M. Reaves, Dairy Science Dept., Virginia Polytechnic Institute, Blacksburg.

Feb. 23—National Feeder Finance Credit Group; Curtis Hotel, Minneapolis, Minn.; sec., R. Lindholm, 502 Thorpe Building, Mpls. 2.

Feb. 26 - March 1 — Colorado Livestock Days; Colorado State University, Fort Collins; chm., Dr. C. D. Story, head, Animal Science Dept.

March 2-3—Oklahoma Feed Industry Conference and Work Shop; Oklahoma State University, Stillwater; Dr. Rollin H. Thayer, chm., Poultry Science Dept.

March 4-6—Nebraska Grain & Feed Dealers Assn.; The Cornhusker Hotel, Lincoln; sec., Howard W. Elm, Terminal Bldg., Lincoln 8, Neb.

March 8 - 9 — Maryland Nutrition Conference; Shoreham Hotel, Washington, D.C.; chm., Dr. R. D. Creek, Poultry Dept., University of Maryland, College Park.

March 13—Illinois Swine Growers Day; Univerity of Illinois, Urbana, Ill.

March 15-16—Oregon Feed & Seed Dealers Assn.; Sheraton Hotel, Portland; sec., Russ Hays, Lewis Bldg., Portland 4.

March 15-17 — Pacific Dairy and Poultry Assn.; Biltmore Hotel, Los Angeles, Cal.; sec., Lloyd J. Powers, 1304 E. 7th St., Los Angeles 21.

March 19-21—Poultry and Egg National Board; Palmer House, Chicago, Ill.; mgr., Lloyd H. Geil, 8 S. Michigan Ave., Chicago 3.

March 21-23—Grain & Feed Dealers National Assn.; Denver - Hilton Hotel, Denver, Colo.; Secretaries Circle meetings March 19-20; sec., Herbert L. Sharp, 401 Folger Bldg., 725 15th St. N.W., Washington, D.C.

March 25 - 30 — Grain Elevator & Processing Superintendents; Town House Motel, Omaha, Neb.; sec., Dean M. Clark, 1115 Board of Trade Bldg., Chicago 4, Ill.

March 28—Distillers Feed Conference; Sheraton Gibson Hotel, Cincinnati, Ohio; Dr. Lawrence E. Carpenter, Executive Director, Distillers Feed Research Council, 1232 Enquirer Bldg., Cincinnati 2.

March 28—Commercial Egg Clinic; Texas A&M College, College Station; B. C. Wormell, Extension Poultry Husbandman.

April 5—Purdue Egg Day; Purdue University, Lafayette, Ind.; chm., David D. Jackson, Poultry Science Dept.

April 9-10 — National Institute of Animal Agriculture; Purdue University, Lafayette, Ind.; sec., Karl D. Butler, P.O. Box 521, First National Bank Bldg., Ithaca, N.Y.

April 10-12—Animal Health Institute; Statler-Hilton Hotel, Washington, D.C.; sec., D. L. Bruner, 512 Shops Bldg., Des Moines 9, Iowa.

April 13 — Illinois Cattle Feeders Day; University of Illinois, Urbana.

April 18—Nebraska Feeders Day; University of Nebraska, Lincoln; chm., Dr. Robert M. Koch, Animal Husbandry Dept.

April 21—Oklahoma Feeders Day; Oklahoma State University, Stillwater; chm., Glen Bratcher, Animal Husbandry Dept.

April 26-28 — Texas Grain & Feed Assn.; Hotel Texas, Ft. Worth; sec., R. B. Bowden, 504 Ft. Worth Club Bldg., Ft. Worth 2.

April 26-28—California Hay, Grain & Feed Dealers Assn.; Biltmore Hotel, Los Angeles, Cal.; sec., Leo L. Johnson, 1400 10th St., Sacramento 14, Cal.

April 26-28—Kansas Grain & Feed Dealers Assn.; Broadview Hotel, Wichita, Kansas; sec., Orris E. Case, 609 Wiley Bldg., Hutchinson, Kansas.

April 27 — Indiana Cattle Feeders Day; Purdue University, Lafayette; chm., Dr. W. M. Beeson, Animal Science Dept.

May 4 - 5 — Illinois Grain Dealers Assn.; St. Nicholas Hotel, Springfield, Ill.; exec. sec., Donald E. Palmer, 910 Lehmann Bldg., Peoria, Ill.

May 7-9—Association of American Feed Control Officials; Sheraton-Blackstone Hotel, Chicago, Ill.; sec., Bruce Poundstone, Agricultural Experiment Station Bldg., University of Kentucky, Lexington.

May 10-11 — Alabama Poultry Industry Assn. Convention and Poultry Jubilee; Dinkler - Tutwiler Hotel, Birmingham, Ala.; sec., W. L. Walsh, Box 567, Montgomery.

May 10-12—American Feed Manufacturers Assn.; Conrad Hilton Hotel, Chicago, Ill.; sec., W. T. Diamond, 53 W. Jackson Blvd., Chicago 54.

May 27-28—Missouri Grain & Feed Assn.; Hotel Governor, Jefferson City, Mo.; sec., D. A. Meinershagen, Higginsville, Mo.

June 8 — Poultry Coronation Banquet; Dinkler Plaza Hotel, Atlanta, Ga.; sec., Abit Massey, Georgia Poultry Federation, Box 493, Gainesville.

June 8-9—Arkansas Poultry Festival; Marion Hotel, Little Rock, Ark.; Charles Hailey, Springdale, chm.; Lex Killebrew, sec., Arkansas Poultry Federation, P.O. Box 1446, Little Rock.

June 28-30—Canadian Feed Manufacturers National Assn.; Sheraton Brock Hotel, Niagara Falls, Ontario, Canada; contact, Gary E. Young, 554 Lakeshore Blvd. East, Toronto 2.

July 13-17—Georgia Feed Assn.; Tides Hotel, St. Petersburg, Fla.; sec., Will L. Kinard, Suite 210-3240 Peachtree Rd. Bldg., Atlanta 5, Ga.

July 17-19—American Poultry Congress & Exposition; St. Louis, Mo.; sec., American Poultry & Hatchery Federation, Don M. Turnbull, 521 E. 63rd St., Kansas City 10, Mo.

Aug. 13-18 — 12th World's Poultry Congress; Show Grounds of the New South Wales Royal Agricultural Socity, Sydney, Australia; Dr. Cliff D. Carpenter, chairman, U.S. Participation Committee, 1207 Emerald Bay, Laguna Beach, Cal.; Dr. A. William Jasper, secretary, c/o AFBF, 2300 Merchandise Mart, Chicago 54, Ill.

Aug. 24—Purdue Swine Day; Purdue University, Lafayette, Ind.; chm., R. A. Pickett, Animal Science Dept.

Dealers Assn.; **State Office Bldg., Es-**

Sept. 5-7—Cornell Nutrition Conference; Cornell University, Ithaca, N.Y.; chm., Dr. R. J. Young, Poultry Husbandry Dept.

Oct. 10-12—Association of American Feed Control Officials; Sheraton-Gibson Hotel, Cincinnati, Ohio; sec., Bruce Poundstone, Agricultural Experiment Station Bldg., University of Kentucky, Lexington.

Nov. 8 — Upper Peninsula Feed Dealers Assn.; State Office Bldg., Escanaba, Mich.; UPFDA, Box 342, Sault Ste. Marie.

Nov. 12-14 — Feed Production School; Continental Hotel, Kansas City; pres., Lloyd S. Larson, Feed Production School, Inc., 20 W. 9th St. Bldg., Kansas City 5, Mo.

1963

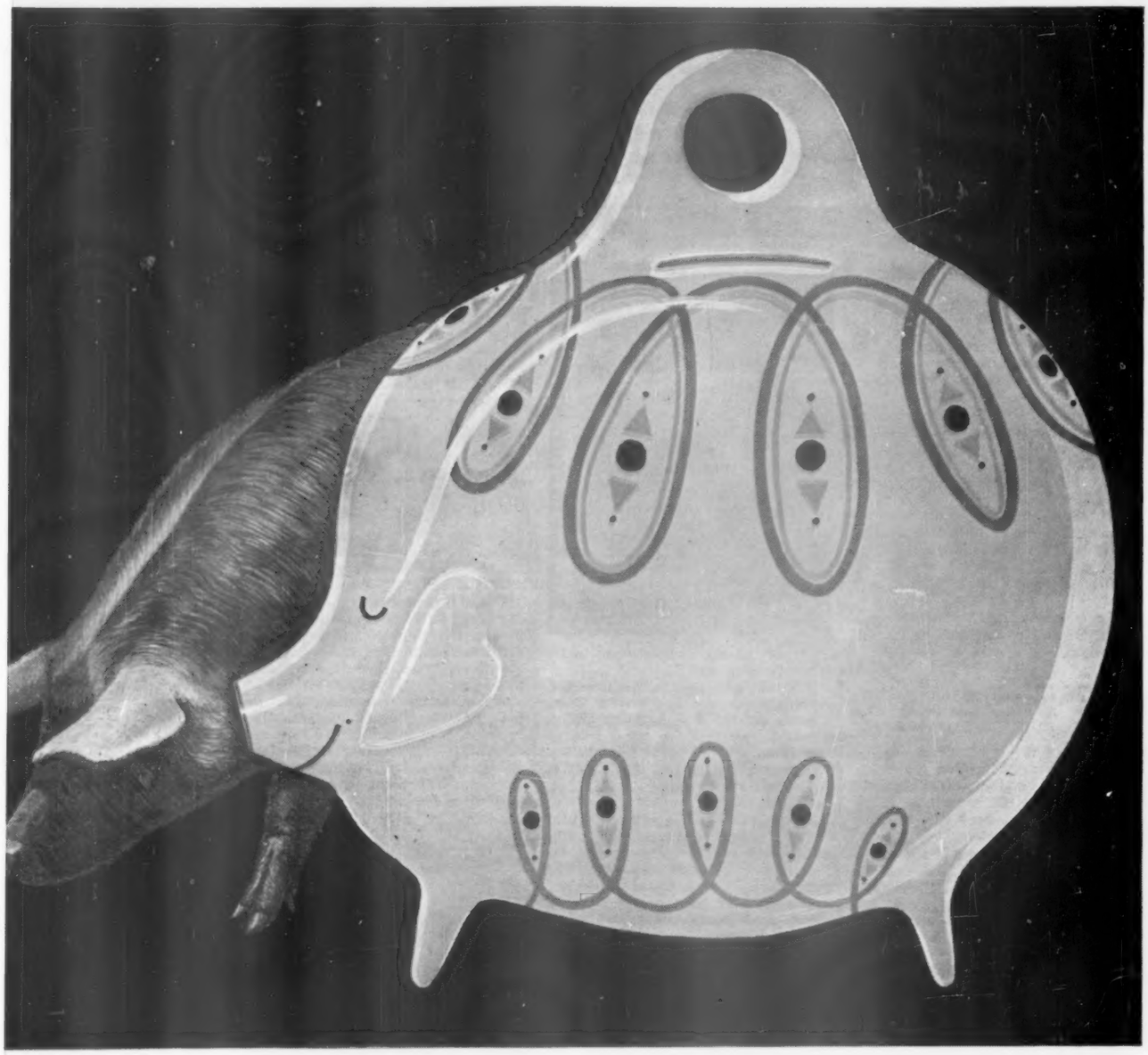
March 24-29 — Grain Elevator & Processing Superintendents; Commodore Perry Hotel, Toledo, Ohio; sec., Dean M. Clark, 1115 Board of Trade Bldg., Chicago 4, Ill.

Farm Marketing Bill Under Consideration

MADISON, WIS. — The Wisconsin Assembly has passed and sent to the Senate a farm marketing bill to permit agricultural commodity groups to issue marketing orders to control production, standards and the sale of their products. The vote was 62-24.

Establishment of an order would require public hearings and approval by two-thirds of the producers. The bill includes poultry, livestock, agricultural, viticultural and vegetable products, but excludes timber, flowers and vegetables grown under contract for canning.

Several agricultural marketing bills have been killed in the Wisconsin legislature in recent sessions, but this bill was introduced by Republicans, who have a majority in both houses. However, its fate in the Senate was considered uncertain, since that body defeated the previous attempts to enact a farm marketing law.



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Dowzene DHC keeps inventories in line. With Dowzene DHC, you reduce your inventory of additives and specialty feeds . . . keep finished feed costs in line for sales and repeat sales. You win steady customers for more benefits at less cost.

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DOW CHEMICAL COMPANY DOW Midland, Michigan

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It gets more food from less feed

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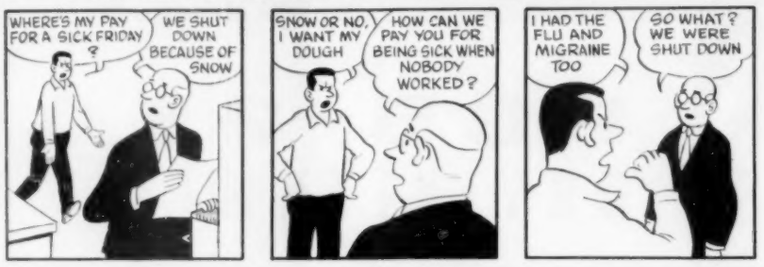
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Assn.; Stardust Hotel, Las Vegas, Nev.; Joseph Chrisman, 430 Board of Trade Bldg., Kansas City 5, Mo.

Feb. 9-11 — Poultry Fact Finding Conference; sponsored by Institute of American Poultry Industries; Municipal Auditorium, Kansas City, Mo.; pres., Harold M. Williams, 67 E. Madison, Chicago 2, Ill.

Feb. 12-13 — Montana Nutrition Conference; Montana State College, Bozeman; chm., Dr. O. O. Thomas, Animal Industry and Range Management Dept.

Feb. 14-15—Pacific Northwest Feed Mill Production School; Benjamin Franklin Hotel, Seattle; sponsored by Washington State Feed Assn.; mgr., John G. Wilson, 814 Second Ave. Bldg., Seattle 4.

Feb. 15-16 — Utah Feed Manufacturers & Dealers Assn. Annual Nutrition Conference and Meeting; The Newhouse Hotel, Salt Lake City; sec., Dr. Lawrence Morris, Brigham Young University, Provo.

Feb. 16 — Washington State Feed Assn. annual convention; Benjamin Franklin Hotel, Seattle; mgr., John G. Wilson, 814 Second Ave. Bldg., Seattle 4.

Feb. 18-20 — Ohio Grain & Feed Dealers Assn.; Commodore Perry Hotel, Toledo; sec., George G. Greenleaf, P.O. Box 151, Worthington.

Feb. 20-21 — Virginia State Feed Convention and Nutrition Conference; Hotel Roanoke, Roanoke, Va.; sec., Virginia State Feed Assn., J. Paul Williams, 615 E. Franklin St., Richmond 19, or Prof. Paul M. Reaves, Dairy Science Dept., Virginia Polytechnic Institute, Blacksburg.

Feb. 23—National Feeder Finance Credit Group; Curtis Hotel, Minneapolis, Minn.; sec., R. Lindholm, 502 Thorpe Building, Mpls. 2.

Feb. 26 - March 1 — Colorado Livestock Days; Colorado State University, Fort Collins; chm., Dr. C. D. Story, head, Animal Science Dept.

March 2-3—Oklahoma Feed Industry Conference and Work Shop; Oklahoma State University, Stillwater; Dr. Rollin H. Thayer, chm., Poultry Science Dept.

March 4-6—Nebraska Grain & Feed Dealers Assn.; The Cornhusker Hotel, Lincoln; sec., Howard W. Elm, Terminal Bldg., Lincoln 8, Neb.

March 8-9 — Maryland Nutrition Conference; Shoreham Hotel, Washington, D.C.; chm., Dr. R. D. Creek, Poultry Dept., University of Maryland, College Park.

March 13—Illinois Swine Growers Day; Univerity of Illinois, Urbana, Ill.

March 15-16—Oregon Feed & Seed Dealers Assn.; Sheraton Hotel, Portland; sec., Russ Hays, Lewis Bldg., Portland 4.

March 15-17 — Pacific Dairy and Poultry Assn.; Biltmore Hotel, Los Angeles, Cal.; sec., Lloyd J. Powers, 1304 E. 7th St., Los Angeles 21.

March 19-21—Poultry and Egg National Board; Palmer House, Chicago, Ill.; mgr., Lloyd H. Geil, 8 S. Michigan Ave., Chicago 3.

March 21-23—Grain & Feed Dealers National Assn.; Denver-Hilton Hotel, Denver, Colo.; Secretaries Circle meetings March 19-20; sec., Herbert L. Sharp, 401 Folger Bldg., 725 15th St. N.W., Washington, D.C.

March 25-30 — Grain Elevator & Processing Superintendents; Town House Motel, Omaha, Neb.; sec., Dean M. Clark, 1115 Board of Trade Bldg., Chicago 4, Ill.

March 28—Distillers Feed Conference; Sheraton Gibson Hotel, Cincinnati, Ohio; Dr. Lawrence E. Carpenter, Executive Director, Distillers Feed Research Council, 1232 Enquirer Bldg., Cincinnati 2.

March 28—Commercial Egg Clinic; Texas A&M College, College Station; B. C. Wormeli, Extension Poultry Husbandman.

April 5—Purdue Egg Day; Purdue University, Lafayette, Ind.; chm., David D. Jackson, Poultry Science Dept.

April 9-10 — National Institute of Animal Agriculture; Purdue University, Lafayette, Ind.; sec., Karl D. Butler, P.O. Box 521, First National Bank Bldg., Ithaca, N.Y.

April 10-12—Animal Health Institute; Statler-Hilton Hotel, Washington, D.C.; sec., D. L. Bruner, 512 Shops Bldg., Des Moines 9, Iowa.

April 13 — Illinois Cattle Feeders Day; University of Illinois, Urbana.

April 18—Nebraska Feeders Day; University of Nebraska, Lincoln; chm., Dr. Robert M. Koch, Animal Husbandry Dept.

April 21—Oklahoma Feeders Day; Oklahoma State University, Stillwater; chm., Glen Bratcher, Animal Husbandry Dept.

April 26-28 — Texas Grain & Feed Assn.; Hotel Texas, Ft. Worth; sec., R. B. Bowden, 504 Ft. Worth Club Bldg., Ft. Worth 2.

April 26-28—California Hay, Grain & Feed Dealers Assn.; Biltmore Hotel, Los Angeles, Cal.; sec., Leo L. Johnson, 1400 10th St., Sacramento 14, Cal.

April 26-28—Kansas Grain & Feed Dealers Assn.; Broadview Hotel, Wichita, Kansas; sec., Orris E. Case, 609 Wiley Bldg., Hutchinson, Kansas.

April 27 — Indiana Cattle Feeders Day; Purdue University, Lafayette; chm., Dr. W. M. Beeson, Animal Science Dept.

May 4-5 — Illinois Grain Dealers Assn.; St. Nicholas Hotel, Springfield, Ill.; exec. sec., Donald E. Palmer, 910 Lehmann Bldg., Peoria, Ill.

May 7-9—Association of American Feed Control Officials; Sheraton-Blackstone Hotel, Chicago, Ill.; sec., Bruce Poundstone, Agricultural Experiment Station Bldg., University of Kentucky, Lexington.

May 10-11 — Alabama Poultry Industry Assn. Convention and Poultry Jubilee; Dinkler-Tutwiler Hotel, Birmingham, Ala.; sec., W. L. Walsh, Box 567, Montgomery.

May 10-12—American Feed Manufacturers Assn.; Conrad Hilton Hotel, Chicago, Ill.; sec., W. T. Diamond, 53 W. Jackson Blvd., Chicago 54.

May 27-28—Missouri Grain & Feed Assn.; Hotel Governor, Jefferson City, Mo.; sec., D. A. Meinershagen, Higginsville, Mo.

June 8 — Poultry Coronation Banquet; Dinkler Plaza Hotel, Atlanta, Ga.; sec., Abit Massey, Georgia Poultry Federation, Box 493, Gainesville.

June 8-9—Arkansas Poultry Festival; Marion Hotel, Little Rock, Ark.; Charles Hailey, Springdale, chm.; Lex Killebrew, sec., Arkansas Poultry Federation, P.O. Box 1446, Little Rock.

June 28-30—Canadian Feed Manufacturers National Assn.; Sheraton Brock Hotel, Niagara Falls, Ontario, Canada; contact, Gary E. Young, 554 Lakeshore Blvd. East, Toronto 2.

July 13-17—Georgia Feed Assn.; Tides Hotel, St. Petersburg, Fla.; sec., Will L. Kinard, Suite 210-3240 Peachtree Rd. Bldg., Atlanta 5, Ga.

July 17-19—American Poultry Congress & Exposition; St. Louis, Mo.; sec., American Poultry & Hatchery Federation, Don M. Turnbull, 521 E. 63rd St., Kansas City 10, Mo.

Aug. 13-18 — 12th World's Poultry Congress; Show Grounds of the New South Wales Royal Agricultural Socity, Sydney, Australia; Dr. Cliff D. Carpenter, chairman, U.S. Participation Committee, 1207 Emerald Bay, Laguna Beach, Cal.; Dr. A. William Jasper, secretary, c/o AFBF, 2300 Merchandise Mart, Chicago 54, Ill.

Aug. 24—Purdue Swine Day; Purdue University, Lafayette, Ind.; chm., R. A. Pickett, Animal Science Dept.

Dealers Assn.; State Office Bldg., Es-

Sept. 5-7—Cornell Nutrition Conference; Cornell University, Ithaca, N.Y.; chm., Dr. R. J. Young, Poultry Husbandry Dept.

Oct. 10-12—Association of American Feed Control Officials; Sheraton-Gibson Hotel, Cincinnati, Ohio; sec., Bruce Poundstone, Agricultural Experiment Station Bldg., University of Kentucky, Lexington.

Nov. 8 — Upper Peninsula Feed Dealers Assn.; State Office Bldg., Escanaba, Mich.; UPFDA, Box 342, Sault Ste. Marie.

Nov. 12-14 — Feed Production School; Continental Hotel, Kansas City; pres., Lloyd S. Larson, Feed Production School, Inc., 20 W. 9th St. Bldg., Kansas City 5, Mo.

1963

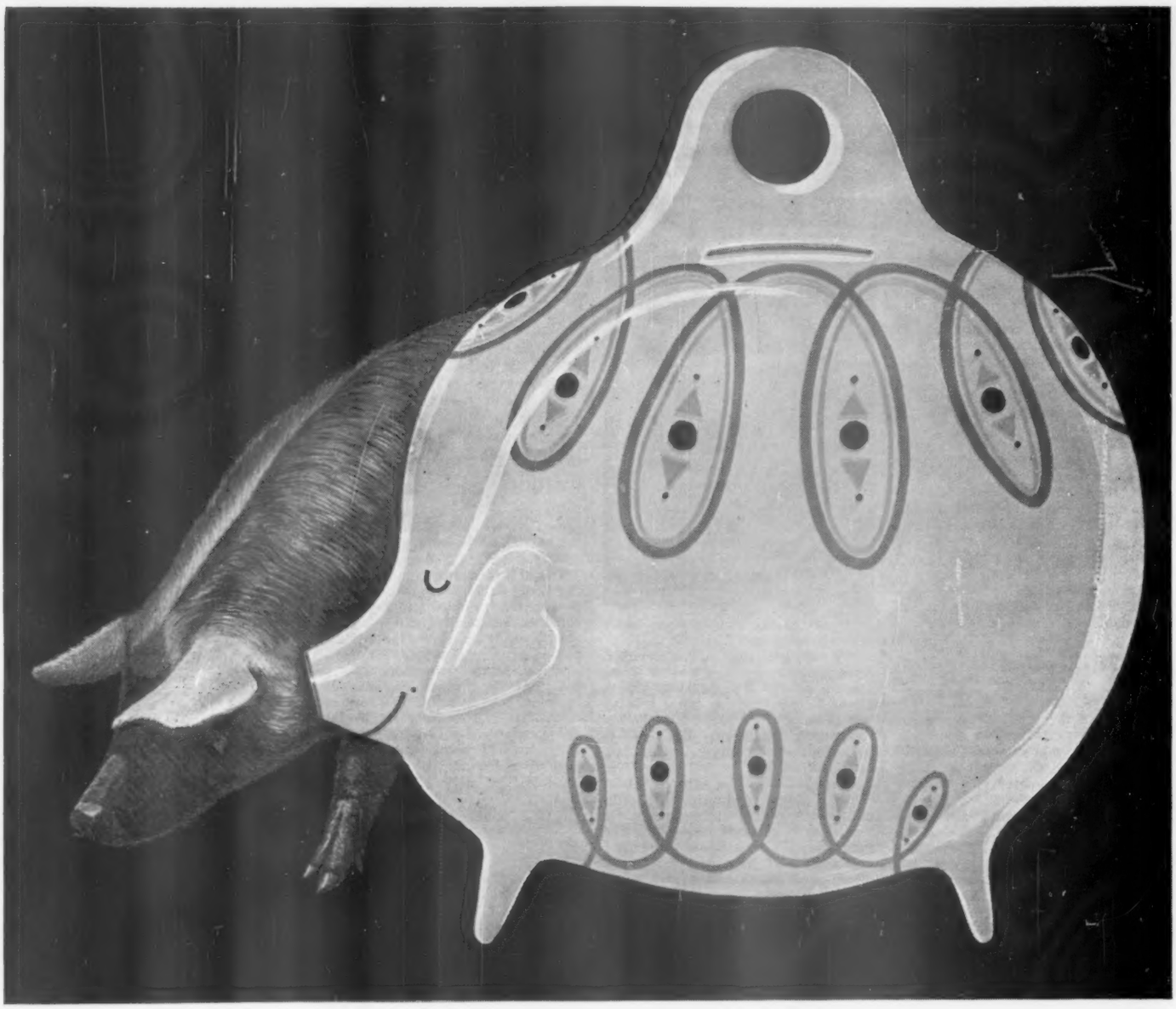
March 24-29 — Grain Elevator & Processing Superintendents; Commodore Perry Hotel, Toledo, Ohio; sec., Dean M. Clark, 1115 Board of Trade Bldg., Chicago 4, Ill.

Farm Marketing Bill Under Consideration

MADISON, WIS. — The Wisconsin Assembly has passed and sent to the Senate a farm marketing bill to permit agricultural commodity groups to issue marketing orders to control production, standards and the sale of their products. The vote was 62-24.

Establishment of an order would require public hearings and approval by two-thirds of the producers. The bill includes poultry, livestock, agricultural, viticultural and vegetable products, but excludes timber, flowers and vegetables grown under contract for canning.

Several agricultural marketing bills have been killed in the Wisconsin legislature in recent sessions, but this bill was introduced by Republicans, who have a majority in both houses. However, its fate in the Senate was considered uncertain, since that body defeated the previous attempts to enact a farm marketing law.



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THE DOW CHEMICAL COMPANY DOW Midland, Michigan

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DESCRIPTIONS OF NEW AND IMPROVED PRODUCTS AND SERVICES PROVIDED BY MANUFACTURERS AND SUPPLIERS ARE PRESENTED IN BRIEF FORM. FOR ADDITIONAL INFORMATION, PLEASE USE THE ACCOMPANYING COUPON.

No. 7808—Fermentation Nutrients

A five page catalog supplement describing three new corn products to be used as fermentation nutrients is available, according to Amber Laboratories, Inc.

Described are Amber 600, a specially prepared corn product; Amber 826, an acid modified corn product with very low cold water viscosity, and Amber 816, a pre-cooked corn product.

All three products contain more than 90% starch and are free flowing powders. They are said to be uniform in analysis. They are available in 100 lb. paper sacks and bulk carlots.

For a copy of the catalog supplement, check No. 7808 on the coupon and mail.

No. 7812—Dial Scales

A manufacturing-marketing agreement between Richardson Scale Co. and August Sauter Co., Ebingen, West Germany, will result in introduction in this country of a full line of precision dial scales.

To be marketed under the name Richardson-ASE Scales, the scales will be the first entry by Richardson into the dial scale field.

Described as having "extreme accuracy and readability," Richardson-ASE Scale dial has a readability of up to one part in 3,000, which, it was explained, is a result of combining double pendulum construction with the system of rotating the indicator up to six complete clockwise revolutions of the dial scale.

The dial indicator makes from 2-6 revolutions in recording weight. Thus, spacing on the dial between graduations is two or three times greater per given weight increment than a comparable single-turn dial. This is equivalent to a reading line 12.5 ft. in length.

A series of 4-20 apertures set in the dial reveal load values of cardinal points as the indicator rotates continuously around the dial. The numbers, it is pointed out, are clear and bold, and "can be read like a clock face." Intermediate graduations are widely spaced and, it is said, can be read quickly and accurately at a glance.

Weighing capabilities of bench, portable, dormant and other types of scales range from 3-2,000 lb. Higher capacity dial heads are available to accommodate larger totals, if needed.

The scale is available with analogue to digital conversion and remote ticket or tape printing of gross weight, tare weight and the net weight difference. Net weights are totaled automatically, providing a printed record.

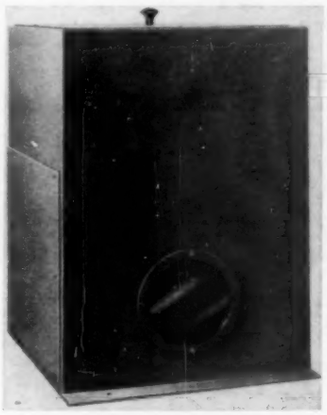
For additional information, check No. 7812 on the coupon and mail.

No. 7799—Volumetric Feeder

Wallace & Tiernan, Inc., has re-designed its volumetric feeder, the Series A-690, to provide a fourfold increase in capacity, it has announced.

The unit is now rated at 11.4 cu. ft. per hour, which is equivalent to approximately 200 lb. of hydrated lime per hour. Capacities start at 0.0065 cu. ft. per hour. Feed rate has stepless adjustment over a 20-1 range.

According to the manufacturer, the basic operating principle of the feeder remains unchanged. The feed section utilizes a rotating and reciprocating screw. This is designed to provide positive displacement feeding with a self-cleaning action. The manufacturer states that flooding cannot occur.



The reinforced plastic solution tank has been increased in size to 35 gal. It can be supplied with a triple-jet mixer or a mechanical mixer. For hard-to-wet chemicals, such as carbon, dual flush cones are now furnished.

For additional information, check No. 7799 on the coupon and mail.

No. 7803—'Bin Bag' Storage System

Announcement has been made of "Bin Bag," an on-the-farm storage system essentially for small grain, corn, soybeans, wheat, etc.

The unit comes in a 70 lb. carton 4 ft. by 20 in. by 10 in., and is erected on the farm. It consists of a multi-wall bag reinforced with asphalt and fiberglass.

It is said to withstand weathering while meeting the demand for low cost storage. Other uses include feeding and sealing (in some areas). Bin Bags are available in 500 bu. units. They are said to last a minimum of one year, and to be adaptable to vented drying. They have a 10 ft. diameter and a filling height of 8 ft. Fitted covers are available as an extra.

For additional information, check No. 7803 on the coupon and mail.

No. 7796—Mobile Steam Roller Mill

A mobile steam grain processing plant is being marketed by Barnard & Leas Manufacturing Co. The equipment is designed for use on farms and feedlots or at country elevator points wherever there is a demand for steamed and rolled grains.

The "B&L Mobile Steam Roller Mill" is a truck-mounted, completely self-contained unit—all powered by the truck engine. Rolling is accomplished with an 18 in. by 30 in. heavy duty roller mill with attached steamer. Steam comes from a 25 h.p. horizontal return tubular type boiler. Tanks with 275 gal. total capacity provide water to supply the boiler during operation. Molasses metering and mixing equipment is optional.

According to the manufacturer, "Capacities will vary, depending upon the grain and physical conditions of loading and unloading, but output of more than six tons per hour is being reported from the field."

For additional information, check No. 7796 on the coupon and mail.

No. 7810—Plastic Feeder Tub

The "Safety Tub," a plastic feeder tub for beef and horses, has been introduced by Carnation-Albers.

Made of strong, durable plastic, the Safety Tub cannot corrode, crack or dent, the manufacturer states. It is 18 in. wide and 8½ in. deep with a capacity of 6½ gal. It weighs 2 lb.

Three built-in installation brackets make it suitable for hanging in stall corners or staking in pastures. The tub has no seams to collect germs, no sharp edges to cause injury, and cannot become brittle or develop an unpleasant odor when left in the sun, according to the manufacturer.

Its single-unit construction and smooth surface make the tub easy

Send me information on the items marked:

- ☐ No. 7796—Steam Roller Mill
- ☐ No. 7799—Volumetric Feeder
- ☐ No. 7803—Storage System
- ☐ No. 7808—Fermentation Nutrients
- ☐ No. 7809—Fertilizer Spreader
- ☐ No. 7810—Plastic Feeder Tub
- ☐ No. 7811—Grain Spreader
- ☐ No. 7812—Dial Scales

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No Synthetic Sources of Protein, only highly palatable *natural proteins.*
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to clean with a simple hosing, it was stated. The tub was tested for over a year before its introduction.

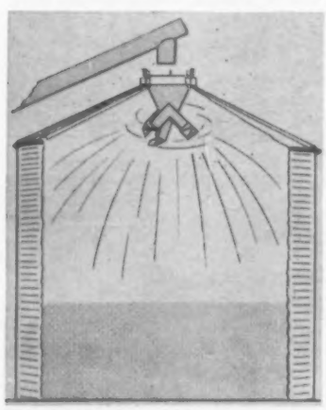
For additional information, check No. 7810 on the coupon and mail.

No. 7811—Grain Spreader

A grain spreader, said to be easily installed in the top of any grain bin opening, is being marketed by Douglas Chemical Co.

Three support arms hook to the top of the bin, eliminating bolt adjustment. The weight of the incoming grain rotates the spreader blades. As the flow of grain increases, rotation speed increases.

The manufacturer points out that, by spreading grain evenly through the bin, the Douglas spreader eliminates nearly all hand leveling and assures even drying. Dust proof ball bearing pillow blocks are a feature of the unit's construction.



For additional information, check No. 7811 on the coupon and mail.

No. 7809—Fertilizer Spreader

A new Pamco tractor-drawn fertilizer spreader was introduced at the recent annual sales meeting of Pamco, Inc., manufacturer of bulk feed and grain delivery trucks, bulk equipment, fertilizer spreaders and allied products.

The new spreader features large tires for easier flotation, screw type jack, stainless steel conveyor chain and other customer approved points, the manufacturer points out.

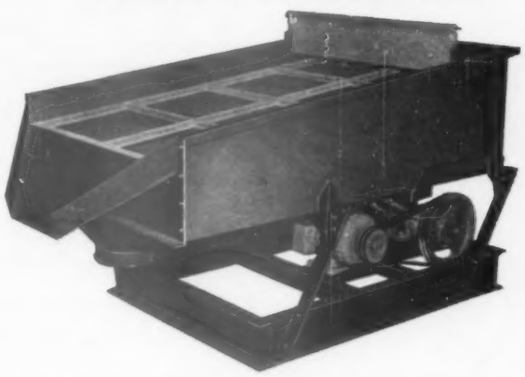
For additional information, check No. 7809 on the coupon and mail.

Also Available

The following new products have been described in previous issues of Feedstuffs and information about them may still be obtained by jotting the appropriate number of the coupon and forwarding it to Feedstuffs.

No. 7737—Literature on die cover, Sprout, Waldron & Co., Inc.
No. 7738—Portable moisture tester, Seedburo Equipment Co.
No. 7739—Booklet on dehydrated alfalfa, American Dehydrators Assn.
No. 7740—Polyethylene valve insert, Union Bag-Camp Paper Co.
No. 7741—Grain storage building, Butler Manufacturing Co.
No. 7742—Premix convenience pack, Vit-A-Way, Inc.
No. 7743—Portable grinder-mixer, Wetmore Pulverizer & Machinery Co.
No. 7744—Concentrate storage bin, Leach Manufacturing Co.
No. 7745—Fowl cholera bacterin, Dorn & Mitchell Laboratories, Inc.
No. 7746—Poultry watering trough, L. A. Pockman Manufacturing Co.
No. 7747—Poultry vaccines, L & M Laboratories.
No. 7748—Automatic clearing valve, Myers-Sherman Co.
No. 7749—Slide diverter valve, Sprout, Waldron & Co., Inc.
No. 7750—Foot rot bulletin, William Cooper & Nephews, Inc.
No. 7751—Screw conveyor brochure, Thomas Conveyor Co.
No. 7752—Bag, carton printer, Minneapolis Sewing Machine Co.
No. 7753—Antibiotic sales premium, Merck & Co., Inc.
No. 7754—Brochure on equipment, Pulverizing Machinery Co.
No. 7755—Make-up air units, Robbins & Myers, Inc.
No. 7756—Medication purchase premium, Hess & Clark.
No. 7757—Four vibrators, Viber Co.
No. 7758—Guarantee on water bowl, Starline, Inc.
No. 7759—Folder on jetslingers, Link-Belt Co.
No. 7760—Metering of dry materials, Thayer Scale Corp.
No. 7761—Sow milking tablets, Agri-Tech, Inc.
No. 7762—Automatic bag filling, closing, Bemis Bro. Bag Co.
No. 7763—Feed phosphate film, International Minerals & Chemical Corp.
No. 7764—Hog farrowing unit, Big Dutchman Automatic Poultry Feeder Co.

THE NEW NOR-VELL
SURE SHAKE



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No. 7765—Tracer technique brochure, Micro Tracers, Inc.

No. 7766—Feeder specification data, B-I-F Industries.

No. 7767—New mixer model, Rapids Machinery Co.

No. 7768—Larger calf tablet jar, Hess & Clark.

No. 7769—Building lining material, American Sisalkraft Co.

No. 7770—Drag-type conveyor system, Industrial Machinery Co.

No. 7771—Brochure on drum separators, Eriez Manufacturing Co.

No. 7772—Mobile unit for grain rolling, Daffin Mfg. Co.

No. 7773—Pneumatic conveyor for marine use, Myers-Sherman Co.

No. 7774—Screw elevator bulletin, Fort Worth Steel & Machinery Co.

No. 7775—Sedimentation test kit, Burrows Equipment Co.

No. 7776—Feed supplement, Philip R. Park, Inc.

No. 7777—Information on sedimentation test kit, Seedburo Equipment Co.

No. 7778—Baby pig anemia drug, Dr. Salsbury's Laboratories.

No. 7779—Mobile mill development, Seco, Inc.

No. 7780—"Right Angle" Feeding System, Wyatt Manufacturing Co., Inc.

No. 7781—Animal bacterin carton, American Scientific Laboratories, Inc.

No. 7782—Open trough mechanical feeder, Oakes Manufacturing Co.

No. 7783—Mobile feed plant, Mooers Manufacturing Co.

No. 7784—Bucket elevator catalog, Screw Conveyor Corp.

No. 7785—Grinder, R. D. Helms Co.

No. 7786—Palletless Handling System, Clark Equipment Co.

No. 7787—Automatic Dump Scale, A. E. Johnson & Sons, Inc.

No. 7788—Fertilizer spreader booklet, Simonsen Manufacturing Co.

No. 7789—New drug package, Dr. Salsbury's Laboratories.

No. 7790—Laboratory pellet mill, California Pellet Mill Co.

No. 7791—Force-feed vertical auger, LML Eng. & Mfg. Corp.

No. 7792—Brochure on battery lift trucks, The Yale and Towne Manufacturing Co.

No. 7793—Hand truck, Valley Craft Products, Inc.

No. 7794—Timer for dust collectors, Pulverizing Machinery Co.

No. 7795—Swine, turkey bacterin, American Scientific Laboratories, Inc.

No. 7797—Conveyor refinements, Screw Conveyor Corp.

No. 7798—Hydraulic truck hoist, Burrows Equipment Co.

No. 7800—Sow's milk replacer, Borden Special Products Co.

No. 7801—Mineralized salt for mixing, Diamond Crystal Salt Co.

No. 7802—Injectable iron product, Myzon Laboratories.

No. 7804—Bulletin on sifters, B. F. Gump Co.

No. 7805—Crusher-feeders, Prater Pulverizer Co.

No. 7806—Bulletin on hammermills, Seco, Inc.

No. 7807—Meal for dusting soft pellets, Fruen Milling Co.

BABY ANIMALS NEED MILK!

Baby animals make their best and most efficient growth on high milk diets. Take advantage of the ability of baby animals to efficiently digest lactose (milk sugar) and milk protein — start them right with a high level of good quality milk products in their first or starting feeds.

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- Contains 20% milk protein — 10% fat.
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- Eliminates problems in procuring milk products of the proper type and quality for baby animal feeds.

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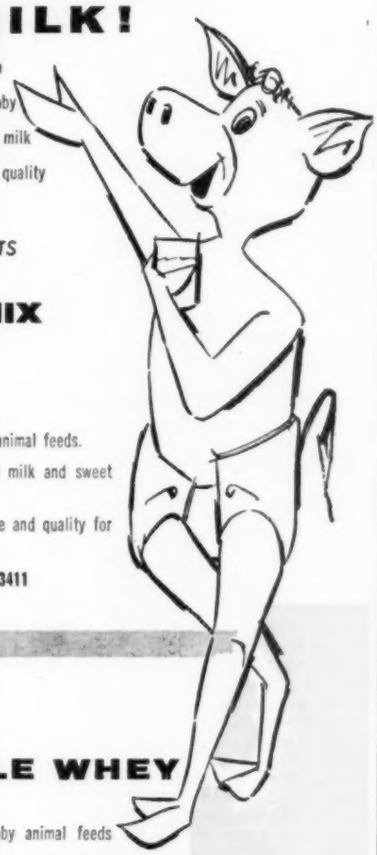

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Program Plans Set for Illinois Nutrition Event

URBANA—A variety of nutrition subjects is on tap for the 1962 Illinois Nutrition Conference Jan. 31-Feb. 1 in the University of Illinois law building auditorium, Urbana.

Dr. A. L. Neumann, Illinois animal science department, will be chairman of the opening session the afternoon of Jan. 31. Speakers and their topics are: Dr. H. M. Scott, "The Effect of a Nonspecific Infection on Chick Growth"; Dr. H. E. Schendel, "Studies on Vitamin K and Its Role in Metabolism"; Dr. F. C. Hines, "Control of Estrus Cycle Through the Feeding of Hormones"; Dr. R. E. Brown, "In Vivo Measurements of Rates of Production of the Volatile Fatty Acids," and Dr. M. J. Wolin, "In Vitro Continuous Culture Technique for Measuring Volatile Fatty Acid Production."

Final speaker of the afternoon will be Dr. R. H. Wasserman, New York State Veterinary College, Cornell University, Ithaca, whose subject is "Radioactive Fallout and Our Food Supply." A banquet will be held that evening for those attending the conference in Hopkins House dining room.

The session in the morning of Feb. 1 will have Dr. G. W. Salisbury, head, university department of dairy science, as chairman. Speakers and subjects are:

Dr. D. E. Becker, "Factors Affecting the Niacin Needs of the Pig"; Dr. H. P. Broquist and Dr. J. H. Byers, "Inhibition of Choline Esterase Found in Leguminous Plants"; Dr. F. A. Kummerow, "Dietary Factors and Heart Disease"; Dr. Neumann, "Status of Vitamin A Research," and Dr. J. Bauernfeind, director, agricultural research, Hoffmann-La Roche, Inc., Nutley, N.J., "The Availability and Relative Biopotency of Various Sources and Preparations of Vitamin A and Carotene."

Conference to Consider Problems of Feedmen

ROANOKE, VA.—The annual Virginia Feed-Nutrition Conference Feb. 20-21 will devote the second day exclusively to practical business problems of feed manufacturers, according to E. B. Kaylor, Harrisonburg, general program chairman.

The first day's session will cover nutrition subjects. Program arrangements were completed at a meeting of the program committee of the Virginia State Feed Assn.

The conference will be at the Hotel Roanoke, Roanoke.

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Type of Test	Average Daily Gain (Lbs.)		Improved Daily Gain (%)		Improved Feed Efficiency (%)	
	Other Antibiotics	TYLAN	Other Antibiotics	TYLAN	Other Antibiotics	TYLAN
Lilly	0.87	0.96	13.0	24.7	7.6	9.7
Colleges	0.76	0.86	26.7	43.3	Not Reported	Not Reported
Farm Trials	0.95	1.00	8.0	13.7	Not Reported	Not Reported

UP TO 100 LBS.

Type of Test	Average Daily Gain (Lbs.)		Improved Daily Gain (%)		Improved Feed Efficiency (%)	
	Other Antibiotics	TYLAN	Other Antibiotics	TYLAN	Other Antibiotics	TYLAN
Lilly	1.15	1.27	8.5	19.8	1.8	0.4
Colleges	1.36	1.43	9.7	15.3	Not Reported	Not Reported
Farm Trials	1.27	1.34	9.4	15.6	Not Reported	Not Reported

UP TO MARKET WT.

Type of Test	Average Daily Gain (Lbs.)		Improved Daily Gain (%)		Improved Feed Efficiency (%)	
	Other Antibiotics	TYLAN	Other Antibiotics	TYLAN	Other Antibiotics	TYLAN
Lilly	1.41	1.46	4.4	8.1	0.6	0.3
Colleges	1.58	1.64	6.0	10.1	Not Reported	Not Reported
Farm Trials	1.30	1.37	7.4	13.2	Not Reported	Not Reported

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Outlook Confusing Now, But Turkey Producer Can Profit Over Long Pull

By Orvel H. Cockrel
Hales & Hunter Co.

The year 1961 goes into the record book as probably the worst "depression" year in turkey industry history. Many producers enter 1962 with bills unpaid and without the ability to pay them. Suppliers enter 1962 with huge receivables on their books and with little likelihood of having them reduced substantially unless producers grow turkeys again in 1962 —and make a profit.

Even if the 1961 crop had shown a modest increase of 5% to 10% compared to the whopping 26% turned in, the year end retail prices would still have been low, some observers now contend. This is based on the theory, held by some, that turkeys compete head-on with chickens, and, as everybody is well aware, we had plenty of chicken in 1961 for turkeys to compete with for the consumer's favor.

According to this same theory, chickens don't necessarily compete with turkeys. But if chicken prices are unusually low, there isn't much the turkey industry can do to keep prices at a profitable level short of a drastic cut in supply.

Hindsight is the world's most perfect science. It is obvious now that 1961 represented an up cycle in the industry which may have been speeded along by such things as:

(1) More profits than expected the previous year.

(2) Continuing trend to year-round production.

(3) The entry of some feed companies into major ownership of turkeys.

(4) An alleged intent of some producers to build a base in anticipation of government controls.

(5) The expectation of the development of profitable export markets.

So, with a 26% increase in numbers of birds, the average turkey producer received about 20.8¢ per pound in 1961 compared with 25.4¢ per pound in 1960. This has spelled "trouble" for the entire industry.

Hatching Figures

What does 1962 look like for the turkey industry? Based on heavy breed hatchings, July-September, and light breed hatchings, September-October, production of turkeys during the first quarter of 1962 will be nearly 10% above a year ago.

The October hatch of heavy breeds was off 4% from a year ago and eggs in incubators Nov. 1 indicate the production of heavy whites in April will be 4% below last year with other

The OUTLOOK From the TURKEY Point of View

heavies and lights down considerably more. If this trend continues, production in the second quarter should be 5% to 8% below a year ago.

The January-June poult hatch is estimated by the Poultry Survey Committee to be 5% to 7% below a year ago. This will roughly determine production for the last half of 1962.

Thus, for the year 1962 production is estimated approximately 5% below 1961. Beginning the year with at least 100 million more pounds in storage means that the 1962 supply will be the same to slightly above the 1961 supply even with a 5% cutback in production.

Price Prospects

Prices in 1962 seem likely to remain near current low levels during the first quarter. They should improve somewhat during the second quarter and by June, 1962, it seems likely that they will equal or go slightly above a year ago. In the important fourth quarter of 1962 prices should be averaging somewhere around 21¢ a pound, or about 2.5¢ above the fourth quarter of 1961.

Storage Jan. 1, 1962, is estimated at nearly 300 million pounds compared to 160 million pounds Jan. 1, 1961. This is equivalent to about 10% of a normal year's turkey crop, assuming about 80 million head as a normal turkey crop. This will overhang the market for the first six or eight months of 1962.

October intentions by turkey breeder flock owners (15 states which account for 81% of the breeders) show 18% more heavy whites and 8% less bronze and other heavies, but no change in total heavies. They show 24% less light breeds and 3% less for all breeds combined.

Testings for pullorum during July-October, 1961, show heavy whites up 11% over a year ago, other heavies down 13%, total heavies up 4%, light breeds down 42% and all breeds down 7%.

In the light of this situation there is little wonder that we are in a real fog as far as the industry is concerned. For in addition to the conditions cited we also have with us all the "ifs and buts" connected with possible turkey marketing orders.

Proposed Actions

These 1961 experiences have caused a flood of proposed actions including increased integration, government controls and severe cuts in credit and financing. At this point, all or any one of these moves could become a reality.

For some time now many have contended that the size of the turkey crop is determined to a large extent by the independent credit and financing decisions of feed and other suppliers. Estimates on the size of the crop which are based on attitudes of growers or intentions reports are but a mental exercise, they contend, with the matter really determined by those who supply the industry. This may be more nearly true in 1962 than in any previous year. As mentioned earlier, many producers simply will not have the resources to go it alone.

Credit and Finance

What will be the attitude of suppliers on credit and finance in 1962? I am certain that at this point the suppliers themselves do not know. The natural reaction will probably be to cut back sharply. On the other hand, financing a producer may look to some like the best hope of receiving payment on 1961 bills. It is a real dilemma.

Based largely on the attitude of the supplier, we could see many turn to further integration as the only way out. A supplier may take the attitude that if he is to take the risk he should have access to any potential profits. In such cases we could see producers, hatcheries and feed manufacturers joining forces in numbers. While there has long been a lot of integration in the turkey industry, the fact that little increased movement has been noted in this direction would seem to indicate that this will not be the case.

A more likely approach would seem to be substantial reductions in credit and finance with increased emphasis on new and better feeds, improved breeding and increased service activities aimed at the producer.

Many further decisions are apparently being held in abeyance until the results of the hearings on marketing orders have been more thoroughly analyzed. The view is widespread that if it seems likely that marketing orders will not be voted in, then placements will be greatly reduced. If, on the other hand, it is felt that we will have marketing orders, then the industry will produce all that "the law allows." Emotions run so high both for and against marketing orders that it is difficult to determine what the reaction will be once the issue is settled.

Popularity Growth

As a product, turkeys have continued to grow in popularity with the consumer. Civilian per capita consumption in 1961 is estimated at 7.4 lb. (ready-to-cook basis) compared to only 6.3 lb. in 1960, which was the previous high. Yet, despite this increase in popularity, supply has run well ahead of demand.

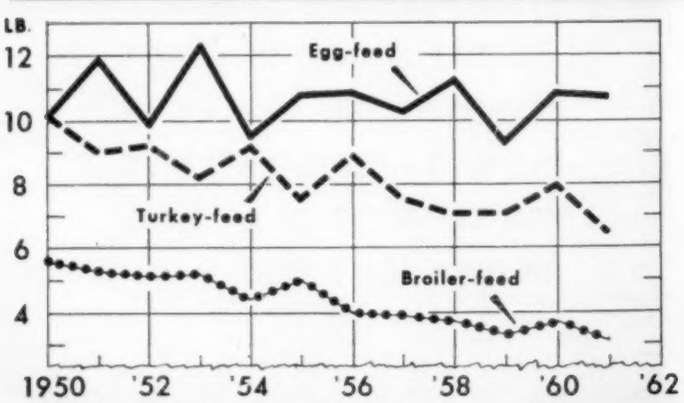
So, regardless of the problems of the industry, it does seem clear that we will continue to see rapid strides in the development of specialty items

Orvel H. Cockrel

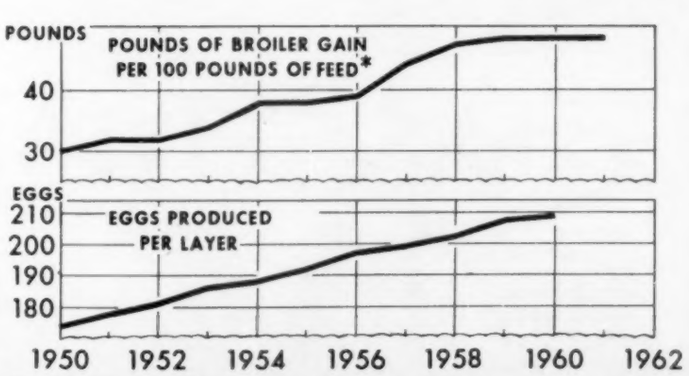
AUTHOR—Before Mr. Cockrel joined the staff of Hales & Hunter Co., Chicago, manufacturer of Red Comb poultry feeds and Pioneer livestock feeds, he was associated with Watt Publishing Co. in several capacities from 1950 to 1958—including marketing research and merchandising and as assistant to the president.

He's a native Kentuckian, a University of Kentucky graduate and a World War II army veteran. After teaching in Kentucky high schools, Mr. Cockrel went to Washington as an economist with the U.S. Department of Agriculture.

His present post with Hales & Hunter is director of marketing.



POULTRY PRODUCT-FEED PRICE RATIOS—A decline in the pounds of poultry ration equivalent in value to a pound of turkey or broiler meat is evident in this USDA chart. The egg-feed price ratio doesn't show a similar trend.



INCREASED EFFICIENCY—Continuing improvements in the number of eggs per layer and pounds of poultry meat per unit of feed (as illustrated in this USDA chart) have lowered the costs of producing these products and have stimulated record outputs.

and in the consumption of turkey meat on a year-around basis. In turkey meat we have an excellent product which is in tune with the advance in modern day diet. We are producing turkeys at ever increasing levels of efficiency.

While the outlook at the moment seems more confused than any other segment of animal agriculture, we will obviously have turkeys produced in volume on an ever increasing year-round basis. Those who undertake the task of producing this important food can expect to do it at a profit over the long pull.

Firm to Specialize in Poultry Consulting

RUSSELLVILLE, ARK. — A consulting firm for the poultry industry is beginning operations here soon, it has been announced.

The company, Further Processing, Inc., will specialize in helping companies develop pre-cooked poultry products and other new products.

Charles R. Owen, vice president, said the firm will open a new plant with 10,000 sq. ft. of floor space. It will be the first independent center in the nation designed primarily for the turkey and poultry industry, he said.

Mr. Owen said the firm will be concerned with development of new products, installation of new products into a processor's facilities, general consulting, marketing information and test marketing. It will work with all types of basic suppliers and processors in all sections of the nation. Bob Beck is president of the company.

HAS MOBILE MILL

PERRYVILLE, MO.—Walter's Mobile Mill Feed Service, operated by Cletus O. Walter, has a new mobile mill (Seco) for use in its business. The firm is a Wayne feed dealer.

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Report Temperature Effect on Chicks With Infectious Bronchitis

CHICAGO — Temperature has a significant effect on the performance of chicks with infectious bronchitis, as well as noninfected chicks, according to experiments reported to the 1961 winter meeting of the American Society of Agricultural Engineers at the Palmer House Hotel here.

R. P. Prince, Dr. R. E. Luginbuhl and Dr. L. D. Matterson, University of Connecticut, Storrs, told the meeting of agricultural engineers that 4-8 week old chicks inoculated with infectious bronchitis virus gained more weight and consumed less feed when housed at a temperature of 75° F. than those housed in 49° F. temperatures.

"Because high mortality is usually not associated with infectious bronchitis, quantitative measures of its effect have been neglected," the Connecticut poultry experts said. "However, infectious bronchitis is recognized as a serious disease, and, when coupled with other respiratory infections, may result in very high mortality. The common recommendation and practice for flocks with infectious bronchitis are to increase air temperature and provide additional ventilation."

The Connecticut experiment showed that an increase in ventilation rate from three fourths of a cubic foot to 2 cu. ft. per minute had little effect on the chicks' performance. Mortality was very low and showed little difference because of temperature or ventilation rate.

"It is observed . . . that the effect of disease on performance of chicks housed at each temperature (75 and 49° F.) was severe even though mortality was not affected," the report continued. "The response of noninfected chicks to cold was better than their diseased counterpart. Noninfected chicks gained on the average 0.11 lb. per bird more weight and consumed 0.08 lb. per bird more feed than the infected treatments during the same period of time. Feed efficiency was better in the noninfected as compared to the infected treatments by about 0.03 lb. of gain per pound of feed consumed."

Oklahoma State Wins Poultry Judging Meet

CHICAGO—Oklahoma State University, Stillwater, won first place in all-around judging at the 38th annual Intercollegiate Poultry Judging Contest in Chicago.

Second was won by the University of Arkansas, Fayetteville, and Pennsylvania State University, University Park, finished third. Students from 12 colleges and universities participated in the two-day event.

Coached by Dr. J. C. Gilbreath, the Oklahoma State team scored 4,115 points of a possible 4,500 for all-around judging in breed selection, market products and egg production. Team members are David Sharp, Michael Henley, George Brant and David Ozment (alternate).

Oklahoma placed first in production judging and Arkansas was first in market products judging and breed selection. Arkansas had 4,056 points for its second place finish. Curtis Striegler, Arkansas, finished first in all-around judging by individuals.

Gerald Shook, Arkansas, finished first in breed selection by individuals; Oklahoma's David Sharp was first in market products judging and George Brant of Oklahoma was first in production judging.

Placing of other entrants was, in order beginning with fourth place: Kansas State University, University of Kentucky, University of Tennessee, Texas A&M College, North Carolina State College, University of Connecticut, Southern Illinois University, University of Missouri and Colorado State University.

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So wrote a professor of animal science at a large midwestern university in response to a letter from a Jamaican feed manufacturer asking which magazine would be most helpful in his business.

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'Mash-Fed Poultry Make More Money, But Crumbles Advantageous at Times'

CAYUGA, N.Y. — Mash or crumbles? That's the question investigated by poultry researchers of Beacon Milling Co., Cayuga, recently—results of which were summarized by Dr. John M. Snyder, Beacon's director of research.

In answer to the question, it was found that mash-fed birds generally make more money, but, in some cases, it's still better to use crumbles.

Birds on low-energy feed do better on crumbles; if the house is real cold, crumbles help the birds lay more eggs, and, when flow out of bulk bins is a problem, crumbles are the solution, it was said.

"Lots of poultrymen tell me they'd rather feed crumbles," Dr. Snyder stated in an article in "Everybody's Poultry Magazine." "Why Crumbles? Here are some of the answers I get: 'Crumbles flow easier, and good flow is a real problem with bulk bins.' 'Crumbles aren't as dusty as mash; my hired man likes the way they slide right out of the feeding pail with no ker-splash.' 'If you feed crumbles, you don't have to feed added pellets, like you do sometimes with mash.'"

Dr. Snyder agreed with all the points, but stated, "Under our research conditions we made more money feeding a straight all-mash feed."

Two Tests

Two tests were set up at the Beacon poultry research farm. Pullets out of the same flock that had been grown together were used. In the one test, birds were housed in a regular hen house.

Dr. Snyder said: "Mash birds outlaid the crumble birds (see Table 1). Mash birds laid at a 74% rate; the crumble birds, 72%. That's good production for both. (We were using a high efficiency feed, our own commercial layer ration market egg mash with arsanilic acid, and a high-speed production layer.)

"The mash birds converted a bit better, too. The mash birds produced a dozen eggs on 3.87 lb. of feed while the crumble birds took 3.92 lb. Notice from the table that feed consumption per 100 birds daily was low (averaged 23.58 lb.) even though the birds laid at a 73% clip.

"If you're like me, you might question the fact that the mash birds took less feed per dozen eggs. We've all heard the old story that broilers convert better if they have a crumble or pellet feed rather than a mash feed. Yes, they convert better to the tune of about 0.1 lb. per pound of broiler meat produced.

"But, here's the twist: With broilers, you're trying to build meat. Crumbles or pellets do build meat better, but they don't convert to eggs as well. This is borne out by looking again at the table. Notice that when the fowl were sold, the crumble birds weighed 4.54 lb. while the mash birds went 4.28 lb. With layers, it's eggs we're looking for, not meat. It sure costs more than it's worth to lay down a lot of meat on fowl."

He cited work on the matter of mash versus crumbles dating back to 1956, done at the University of Idaho by C. F. Petersen.

Dr. Snyder went on to say: "Prof. Petersen found, as we did, that the birds on mash converted better. He ran two experiments, and in the first experiment, he found that the mash birds converted 0.17 lb. better, and in the second experiment, 0.29 lb. better. In both experiments, he found that the mash birds laid just a little bit better—73 versus 71% in the first experiment, and 72 versus 71% in the second experiment. The figures I'm telling you about are Prof. Petersen's results with a high efficiency diet, 912 calories of productive energy per pound. (Our ration had much more energy.)

"Prof. Petersen also made another very significant finding: While the mash birds on a high energy diet performed better than the crumble birds, this **was not** true with a **low** energy diet. In his first experiment, Prof. Petersen found that the low-energy crumble-fed birds laid 71%, while their mash counterparts laid only 68%. And, in the second test, the difference was 74 versus 70%.

"I say this is a very important finding (from a practical standpoint) for this reason: If you're feeding a cheap feed, maybe you'd best feed crumbles. Of course, not all cheap feeds are cheap because they're low in energy. But, then the odds are pretty good that this is the reason. More than two-thirds of the cost of a bag of feed is in the energy part of that bag. So, if anyone wants to cut on the formulation cost, the handiest way to do it is to reduce the energy."

Additional Cost

Another thing to consider, Dr. Snyder said, is the added cost of crumbles. "They cost an extra 10¢ per bag, $2 per ton. So when you buy crumbles, your feed cost goes up 2% or more. That's an extra cost of $400 or $500 a year for a 5,000 bird flock.

"Sometimes you can spend an extra $400 or $500 a year and make money doing it . . . but our research shows that the extra investment of $400 or $500 per year in crumbles just doesn't pay off." In the test, a little over $20 more per 100 birds was the result of feeding mash, which would be $1,000 for 5,000 birds, he pointed out.

Second Test

"This brings us to our second test. In the second test, birds on crumbles produced a little better than the birds on mash. For the 278-day test, the crumble birds produced at the terrific rate of 75%. The mash birds averaged a little over 72%. But the crumble birds still didn't make as much money for us as the mash birds. Here's the catch: It took the crumble birds 4.35 lb. of feed to produce a dozen eggs, while the mash birds did it on 4.08 lb. Also, remember that the crumble birds had to ante up an extra 10¢ per bag for their feed. Net result: We made nearly $10 more per 100 birds on the mash feed than we did on the crumble feed (same high-efficiency formulation as in the first test)."

It was evident that the weather made a difference to chickens comparing the two tests, Dr. Snyder pointed out. It is believed the birds in the second test laid better, compared with the mash birds, because they were in an uninsulated house, while test one birds were in an insulated house.

During February birds in both houses were hit hard by the cold—those in the insulated house slumping to 66% production, those in the uninsulated house skidding to 50%.

"But the ones that really took a nosedive were the mash birds in the uninsulated house," he said. "They were all the way down to 43%, while their sisters, just across the aisle, getting crumbles, slumped to only 75%. In the insulated house, it didn't make much difference—the mash and crumble birds laid about the same." In cold weather, birds can eat a lot more energy a lot easier and a lot faster if the feed is in a pellet or crumble form, he explained.

Debeaking, "good insurance anytime," is a "must" with crumbles or pellets, Dr. Snyder said. This is because birds fill up much faster on crumbles or pellets and have time to pick on one another.

Summary

He summarized: "(1) With a high efficiency feed (and that's the only kind you can afford to use) our research says: 'You can make more money on mash than in crumbles.' (2) During extra cold weather, if you have an uninsulated house (and that's not the kind to have), birds will maintain better egg production if fed on crumbles."

TABLE 1. Mash vs. Crumbles
Duplicate Pens—50 Birds Per Pen—278-Day Summary

	Mash	Crumbles
Per cent production (hen-day basis)	74	72
Pounds feed per dozen eggs	3.87	3.92
Average feed per 100 birds per day, lb.	23.73	23.43
Feed cost per dozen eggs, cents	17.55	18.17
Mortality, %	3	5
Body weight of fowl, lb.	4.28	4.54
Gross return per 100 birds started:		
Eggs (38 cents per dozen)	$638.93	$616.13
Live fowl (8 cents per pound)	33.21	34.50
Total	$672.14	$650.63
Total feed cost per 100 birds	$295.50	$294.45
Return over feed cost per 100 birds	$376.64	$356.18

The difference is $20.46 per 100 birds started, in favor of mash.

Eighth Nevada Feed Conference Scheduled

RENO — The 8th annual Nevada Feed Conference will be held Jan. 22, 1962, at the education auditorium on the University of Nevada campus, Reno, according to W. C. Behrens, extension livestock specialist, Max C. Fleischmann college of agriculture.

The program will feature reports on research on minerals in dairy rations, implications of land development for cattle feeding in Nevada, range supplements for cattle and relationships of breeding problems to nutrition. College of agriculture and feed industry personnel are slated to appear on the program.

The conference is sponsored jointly by the cooperative extension service and the agricultural experiment station. It has been attended by livestock producers, dairymen and representatives of related industries from Nevada and adjoining counties of California.

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BUSINESS

(Continued from page 11)

"Taking over by large feed mills of direct selling to poultry producers."

MIDWEST—Regional: "Generating the terrific efficiency, within our own organization, that is the determining factor for success in our now 'mature' industry."

"The single greatest detriment to the feed industry today is careless and irresponsible financing by companies who are trying to buy sufficient volume to take care of surplus milling facilities."

"No doubt the major obstacle and competitive factor in the feed industry is the enormous demand for financing. Financing of the local feed dealer or the commercial feeding operation seems to be the tendency and is a real problem for all feed manufacturers or retailers."

"The insistence of some people of enlarging a branch of their business which is already losing money."

"High support prices on grain can tend to lower profit potential on feeding operations and could increase grain farming. Unfavorable tax advantages of co-ops create unfair competition. Government marketing orders and production control would be rough."

State: "Co-ops are our major obstacle and competitive factor . . ."

"Profit will be hampered by the inability to forecast markets due to government regulation."

"On-the-farm mixing and use of corn-soy rations with no commercial feeds."

Local: "Improper sales efforts."

"Grower financing, possibility of government controls, government interference in free grain trade and monopolistic direction of largest manufacturers."

"More adequate distribution system and lessen credit risk."

"(1) Increased competition from large concerns. (2) The present trend of small farmers to quit. If this continues, it will be increasingly difficult for the small independent manufacturer to find an outlet for his products."

"I think the only real factor we have to face is competition from the government. If they will stay out of the feed business, we can all prosper with hard work, good management and expanded services."

"If there is more integration there will be increased volume in some areas of feeding, but the increase will cause surpluses which will cost the integrators."

"Lack of chickens on family farms."

SOUTHWEST—Regional: "Larger commercialized units; farmers going on social security at earliest possible age and very few young people staying on farms are reducing the number of small farm operators; much land and buildings laying idle."

"Big increase in the number of small cooperative feed mills with tax advantage."

"Small manufacturers who do not know their operating costs."

"Feed manufacturers this coming year are quite likely to be more concerned about the possibility of government controls in the form of marketing orders or other government supervision than they are from competition or competitive factors. This is the major obstacle to the entire industry, and we are very much opposed to any form of government control in the poultry and livestock industry. . . . Credit will undoubtedly restrict increases in poultry tonnage substantially over what they were in 1961, and because of the low prices that have existed in the broiler and poultry industry competition will be keen for the sale of other types of formula feeds."

State: "Long-distance deliveries (50 to 100 miles) direct from miller to feedlot. Also, do-it-yourselfism among feeders encouraged by college extension offices, etc."

Local: "The damn government."

WEST—Regional: "Market prices; utilization of 'bonus' payments for end products to obtain feed sales; attempts by some to maintain marginal growers through unwise financing."

"The main obstacles are on-the-farm milling and in-the-feedlot milling. The feed manufacturer must be able to do it more efficiently and convince the feeder that he is able to do so in order to earn the business."

State: "Practice of feeding feed grains and not a formula feed."

"The only good credit in the feed business is the beef cattle end. All the rest must be carefully watched all the time."

Local: "Cut-rate tactics of one major competitor."

"In the Pacific Northwest the major obstacle to increased business is the high price of feed grains compared with the price of feed grains in the corn and milo states. This is an administered relationship created by price support policies and export subsidies and is not caused by a shortage of Northwest feed grain (barley)."

"Production cost must be reduced as well as distribution cost to halt the increase in on-the-farm milling. Cooperative advantages must be equalized."

"Some of the real big feed companies have wrecked the poultry business for the small mill, but they haven't been able to get a good hold on the hog and cattle business yet."

"Financing by large (national) chain feed mills."

"Inequitable federal feed grain program in the western states in relationship to other areas of the nation."

Idaho Reports on Veal Feeding Tests

MOSCOW, IDAHO—Holstein veal calves continue to show the most economical gains on fortified dried skim milk in veal feeding trials presently being conducted by the University of Idaho at its Caldwell Branch Experiment Station.

The current series of tests was designed to increase the energy of the dried skim milk by adding animal fat, the researchers say. Levels being fed are 0, 10, 20 and 30% lard or tallow.

The calves on the control ration of dried skim milk plus 400,000 units of vitamin A, 50,000 units of vitamin D and five gm. of Aureomycin per 100 lb. of powder produced veal at a cost of $16 per 100 lb. of veal. Allowing $20 for the cost of the calf, the calves fed this ration returned $11 per head when sold at the average price of $22 per cwt. The calves were healthy at all times and required very little veterinary attention, it was reported.

The addition of 10% animal fat either as lard or tallow makes the calves look better, the research group said. The hair is shinier, they have less scouring, and their general activity is higher than any of the other rations tried. This group of calves, however, required an additional two weeks to make the 225 lb. market weight, it was stated. This additional 60 pounds of feed increased the cost so that these calves were only able to return $5 per head.

The rations containing higher amounts of animal fat tended to increase the feeding costs even more, the report showed. The calves on the 30% tallow ration were unable to make sufficient gains in 12 weeks to be marketed.

Further work is being done to improve the present dried skim milk ration which is the only one which can be recommended at the present time, say the Idaho scientists.

Ingredient Jobber Named in Suit

LITTLE ROCK, ARK.—A suit asking for a $49,474 judgment against Robert Y. McClure of Russellville, former president of the bankrupt Commodities, Inc., Dardanelle, has been filed in U.S. District Court here. The judgment is sought by Hi-Pro Fish Products, Inc., Morgan City, La.

Commodities, Inc., a jobber and broker of poultry and animal feed ingredients was declared bankrupt in federal district court Nov. 5, 1959, on a petition filed by Hi-Pro Fish Products and two other creditors.

In a statement of affairs filed on Jan. 4, 1960, the Dardanelle firm listed debts of $151,609 and assets of only $42,960 and the value of its office equipment. Court officials said the bankruptcy case is pending liquidation of Commodities, Inc., debts and assets.

The Louisiana firm contends in its new suit that the insolvency of Commodities, Inc., was caused by "negligence and mismanagement." The suit states that by reason of Mr. McClure's conduct he should be required to pay $49,474 in debts of Commodities, Inc.

The suit listed the following debts: $24,702 to Hi-Pro Fish Products; $2,100 to Bronson Woodworth, Dardanelle, former vice president of Commodities, Inc.; $847 to Dardanelle Motors, Inc.; $2,005 to Shellbuilder Co., Houston, Texas; $8,563 to Pullen & Price Seed Co., Royce, Texas; $1,867 to Sanders Paris Co., Coolidge, Texas; $6,331 to Continental Grain Co., Frisco, Texas; $4,866 to Louisiana Menhaden Co., Lake Charles, La.; $989 to United Salt Corp., Houston, Texas.

Hi-Pro Fish Products officials said the other firms had assigned their claims to it. All were named as plaintiffs "so there may be no want of proper and necessary parties," the suit stated.

HORSE FEED MARKET A GROWING ONE

AMARILLO, TEXAS—The horse is not disappearing. In fact, in recent years, horse numbers have been steadily increasing, says Sandy Newsom, Amarillo, field representative for the American Quarter Horse Assn. He indicates that the horse market is strengthening in the Midwest and East, and to a certain extent in the South. The association records show registering 46,000 horses during the last fiscal year.

Mr. Newsom says that as Americans gain more leisure time, they are turning from boats to horses.

Feed men in many areas of the country are capitalizing on this growing market. An example is the Bossier Lone Star Feed & Fertilizer Co., Bossier City, La., which made a survey of horse population in its area and is now furnishing feed and other supplies for 2,000 horses.

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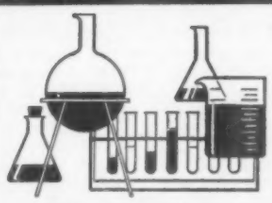

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Names in the News

KENNETH R. WERNER NAMED DOUGHBOY TURKEY SPECIALIST—Kenneth R. Werner, Sumner, Iowa, has been named turkey specialist for Doughboy Feeds in the state of Iowa, it was announced by Russell Solheim, general manager of the Ames, Iowa branch of Doughboy.

Kenneth R. Werner

Mr. Werner has been associated with the formula feeds division of Doughboy Industries for 11 years, and works out of the Ames division headquarters.

A graduate of State College of Iowa, Cedar Falls, Mr. Werner was an ag teacher in Readlyn, Iowa for five years, operated a chicken hatchery in Readlyn for six years, and later acquired a farm and raised turkeys.

As a salesman for Doughboy, he worked in the northeast section of Iowa. Mr. Werner's former territory is being serviced by Ronald Buhr, Oran, Iowa.

HENRY FISHER APPOINTED CONTINENTAL GRAIN NORFOLK MANAGER—Henry Fisher has been appointed manager of Continental Grain Co.'s Norfolk, Va., operations replacing Edward Pierce, according to Michel Fribourg, president.

Mr. Fisher had been the assistant manager of the Norfolk office since February of this year after having occupied the same position at Continental's New Orleans office.

Mr. Pierce, after a short stay in the New York office, will be given a temporary assignment at the company's Paris offices.

CENTRAL SOYA NAMES ELEVATOR SUPERINTENDENT—The promotion of James Kirk to the position of elevator superintendent, Central Soya's Bellevue, Ohio, plant, has been announced by Harry Stokely, plant manager.

Mr. Kirk joined Central Soya in 1957 as elevator specialist at the company's Marion, Ohio, plant. He later served on the elevator staff at the Elevator "A" in Chicago; its Gibson City, Ill., plant, and at the Chattanooga facility.

IDAH-BEST NAMES FIELD REPRESENTATIVE—Idah-Best, Inc., Caldwell, Idaho, a cooperative feed company, has announced the appointment of Harold Bolen as field representative for eastern Idaho. Mr. Bolen will be responsible for sales and promotion activity in the area served by the company's feed mill at Idaho Falls.

Mr. Bolen attended Rutgers University, New Brunswick, N.J., where he majored in poultry husbandry. He has had experience as assistant manager of an Allied Mills feed store, in operation of his own hatchery, as a territory manager in the states of Virginia, West Virginia, Maryland and Pennsylvania for Allied Mills, and as territory manager for Albers Milling Co.

T. C. ROTHBAUER APPOINTED DR. SALSBURY'S EXPORT MANAGER—T. C. Rothbauer, Yardley, Pa., has been appointed export manager by Dr. Salsbury's Laboratories, Charles City, Iowa. Mr. Rothbauer has been a territory manager for Dr. Salsbury's since Jan. 1, 1956.

H. G. Bos, marketing vice president, said the new post will be activated Jan. 1. Mr. Rothbauer will be charged with directing the foreign sales activity of the firm.

Mr. Rothbauer received a B.S. degree in poultry husbandry from Pennsylvania State University, University Park; worked as a marketing specialist for the poultry branch of the U.S. Department of Agriculture during which time he obtained his M.S. degree in poultry marketing from Purdue University, Lafayette, Ind., and was assistant to the managing director, Northeastern Poultry Producers Council, Trenton, N.J., until he joined the Dr. Salsbury's sales organization.

EDWARD FLYNN APPOINTED BY WIRTHMORE—Edward Flynn has been appointed to the purchasing department of Wirthmore Feeds, Inc., Waltham, Mass., according to Granville M. Bond, president.

Edward Flynn

Prior to his appointment, Mr. Flynn was analyst for Wirthmore controller's department. He is a graduate of the Bentley School of Accounting and Finance and has attended Suffolk University, Boston. Before his employment with Wirthmore, he served with the internal auditing department of Corn Products Co., New York.

OFFICERS ELECTED BY MEMPHIS GRAIN & HAY ASSN.—Cary H. Humphries, Cargill, Inc., has been elected 1962 president of the Memphis Grain & Hay Assn.

Elected vice president was J. Wellford Withers, Associated Brokerage Co. Five new directors selected by the members are: Bruce Ballew, Farmers Milling and Elevator Co., Collierville; J. S. Harpster, Standard Commission Co.; S. Tage Pease, S. T. Pease, Jr. & Co.; H. D. Tobias, Goldenrod Oil Meal Sales Co., and C. Turner Whitworth, Nutrena Mills, Inc.

JOHN W. ZIPOY JOINS MIDWEST BAG CO.—John W. Zipoy has joined the sales force of Midwest Bag Manufacturing Co., Des Moines, and will headquarter in Minneapolis.

Mr. Zipoy was formerly Minneapolis branch manager of the Pillsbury Co. feed division. His past experience also includes service as chief of the Office of Price Stabilization feed section, Washington, and general manager of Sioux Soya Mills, Sioux City, Iowa. He is also a past president of the Northwest Feed Manufacturers Assn.

FORMER FEED EXECUTIVE MAKES SUCCESSFUL POLITICAL BID—Dinsmore Worthing, Wirthmore Feeds executive vice president until his retirement two years ago, has made his first venture into politics a successful one. Mr. Worthing has been elected mayor of Saco, Maine, heading the Republican ticket in a former Democratic stronghold.

Saco is an industrial city 20 miles south of Portland. Mr. Worthing has lived in Saco since his retirement. He operated a variety store until his entry into politics where the GOP won six of seven city council seats.

The last GOP mayor of Saco is now representing Maine's first congressional district in Washington. He is Congressman Peter Garland.

ANNOUNCE NEW SALES MANAGER, TWO SALESMEN JOIN WALLACE HATCHERY—Two new salesmen have been added to the staff of Wallace Hatchery, Inc., St. Petersburg, Fla., and appointment of a sales manager has been announced, according to John Wallace, president.

New salesmen are James A. Rigsby, Albany, Ga., and Bob Hawkins, formerly of Gainesville, Ga. T. G. (Red) Holbrook, a veteran of the firm, had been promoted to sales manager. The appointments are to implement a change in the sales and service setup of the organization, Mr. Wallace stated. This involves combining four territories into three.

Mr. Rigsby has been engaged in poultry sales and service work since 1946. Mr. Hawkins was managing editor of the Georgia Poultry Times and Southeastern Poultry Times prior to his appointment.

Bob Henderson, who has been covering the southeast Florida territory, has taken on additional territory.

INTERNATIONAL MILLING AWARDS SCHOLARSHIP—The first annual $300 International Milling Co. agricultural-biochemistry scholarship at the University of Minnesota, St. Paul, has been awarded to Dexter D. Fuller, Deerwood, Minn., a junior in the college of agriculture at the university.

The new scholarship brings to 12 the number of scholarships awarded by International to students interested in flour milling, feed technology or allied industries.

NUTRENA NAMES WILLIAM B. PALM, JR., TO SOUTHWEST REGION POST—William B. Palm, Jr., poultry products sales manager, Nutrena Feeds, Minneapolis, has been named southwest region poultry products manager in the firm's Kansas City office, the company announced.

The assignment will locate Mr. Palm close to Nutrena's expanding poultry operations in Oklahoma, Texas, Colorado, Kansas and parts of Missouri and Arkansas, company officials said.

Mr. Palm joined Nutrena in 1950 as turkey specialist in Brownwood, Texas. He has served as turkey sales specialist in Wichita Falls, Texas, and turkey sales supervisor in the general office in Minneapolis. Mr. Palm is a graduate of Texas A&M College, College Station, with a major in animal husbandry.

R. F. SCHULTZ NAMED GENERAL MANAGER OF HOOKER'S PHOSPHORUS DIVISION—Robert F. Schultz has been promoted to general manager of the phosphorus division of Hooker Chemical Corp., New York, it has been announced by Thomas F. Willers, executive vice president of the corporation. Mr. Schultz succeeds Robert E. Noble, who has resigned. Mr. Schultz will move to the phosphorus division headquarters, Jeffersonville, Ind., the first of the year to assume his new responsibilities. Since November, 1960, he has been manager, process development, in the corporate research and development department, Niagara Falls, N.Y.

Robert F. Schultz

Mr. Schultz, who has degrees in chemical engineering, has been associated with Hooker for 20 years.

PINE MANOR ANNOUNCES APPOINTMENTS—Pine Manor, Inc., Goshen, Ind., has announced appointment of new personnel to divisions of its turkey enterprises.

Orval Wyse has been appointed hatchery superintendent and sales manager of the hatchery division. Mr. Wyse formerly operated Wyse Bros. Turkey Hatchery, Archbold, Ohio, one of the largest turkey hatcheries in the Midwest, which hatched 2 million poults annually. He will aid Pine Manor in developing a turkey broiler program in Indiana.

Dr. Dennis P. Rahn has been appointed veterinarian in charge of a poultry diagnostic laboratory at Pine Manor to assist in the turkey health and preventive disease program. Dr. Rahn received his D.V.M. from the University of Minnesota and has been an instructor at the University of Illinois.

Plan Poultry Industry Seminar

LAFAYETTE, IND.—The first in a series of one week seminars for poultry industry management personnel in the Midwest is planned for May 14-18, 1962, at Purdue University, Lafayette.

Plans are for four, 1½ hour sessions each day to be conducted on a workshop basis. Participants will have an opportunity to learn new management tools and how to apply them. Poultry industry case studies will be used as problems to be worked through in class. Outlines of class material, case problems and illustrative material will be provided in notebook form, according to plans.

Sessions will be in Purdue Memorial Center, Lafayette. Fee for the course is $100, which includes registration and materials, but not room and board. Enrollment number will be limited.

Topics to be covered during the week will include: Management job, personnel management, communications, industry problems, outlook and forecasting, profits from quality, applying poultry statistics, analyzing financial statements, sales planning, challenge of merchandising, cost accounting.

Facilities planning, protecting profits by cutting costs, maximizing profits, financial planning, financing and credit and tax problems.

The second seminar is planned for fall, 1962, on "Managing Your Time." A third seminar will be planned, and it is expected that these seminars will be a yearly series, it was stated. Sponsors are the Indiana State Poultry Assn. and the agricultural economics and poultry departments of Purdue.

Kansas City Feed Club Has Yule Dinner Dance

KANSAS CITY—A record crowd of 318 attended the annual Kansas City Feed Club Christmas dinner dance Dec. 16 at the Town House Hotel in Kansas City, Kansas.

Mr. and Mrs. M. A. McClelland, M. A. McClelland Co., Kansas City, were the winners of the expense-paid weekend trip to Las Vegas which was given away. Each of the ladies received either an umbrella or a handbag.

G. R. Coughenour, Rodney Milling Co., club president, was master of ceremonies.

The next meeting of the club is scheduled for Jan. 18. Dinner at the Muehlebach Hotel will be followed by attendance at a Kansas City Steers professional basketball game in the Municipal Auditorium.

Electronic 'Mother'

MANHATTAN, KANSAS—In this electronic age, even calves aren't forgotten. There's an electronic "mother" for them that is gaining in popularity, according to an extension agricultural engineer at Kansas State University, Manhattan.

Harold E. Stover says the device is a feeder that blends water with a dry milk-replacer food, holds it at a temperature of 100°, and dispenses it through a standard calf nipple.

Food is available at all times so the calves can eat at any time. A time-delay feature is provided, however, to keep them from overeating. The formula can be enriched or weakened by changing the ratio of the milk-replacer powder to water.

"The feeder connects to any pressure water system and a 115-volt receptacle. It can be mounted on a column or wall in the barn so that a nipple is in a natural feeding position. A hopper holds up to 25 lb. of the powder and an electric vibrator keeps it flowing."

Mr. Stover added that the electronic feeder is usually used until calves are 6-8 weeks old. It is possible to add medications to the solution. The device costs around $325 and will feed up to 12 calves at a time, he pointed out.

University of Illinois:

Availability—Supplements included in the test were two dicalcium phosphates, bonemeal, defluorinated rock phosphate, imported rock phosphate and colloidal phosphate. Differences in percent of phosphorus retained, between phosphorus supplements tested, between steers and between periods were not significant.

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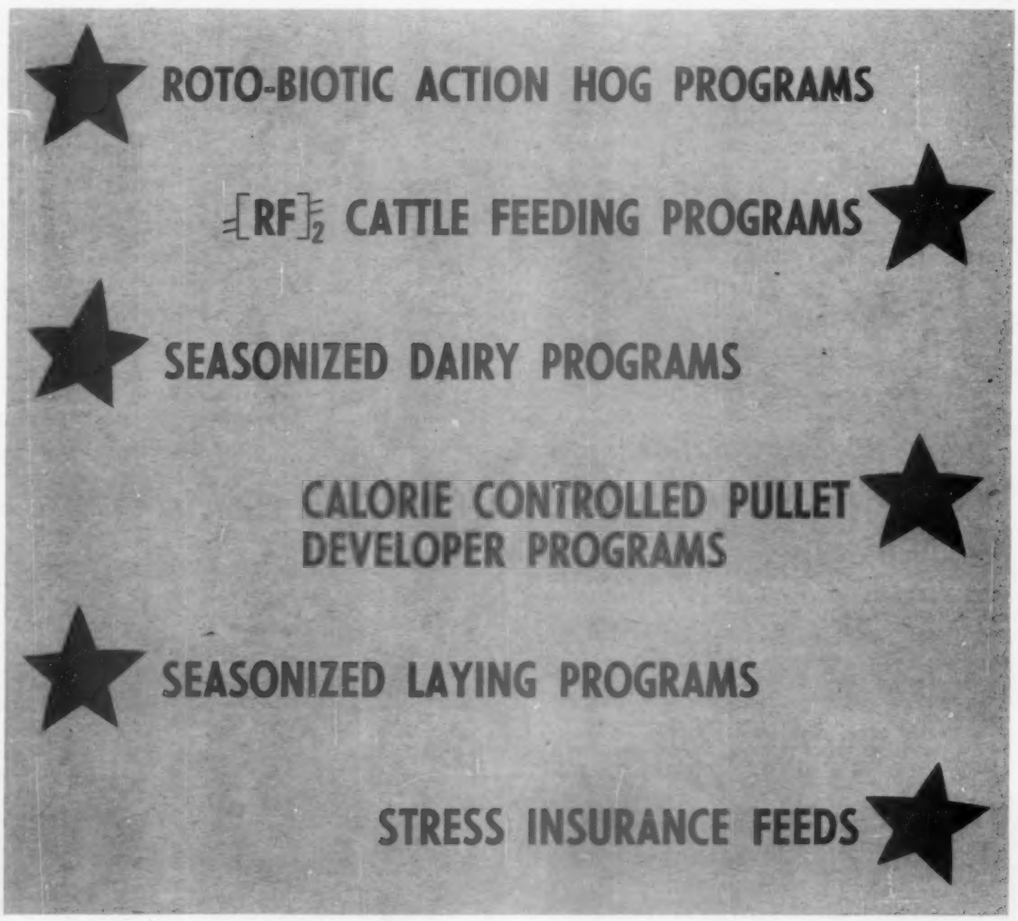

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INDUSTRY

(Continued from page 16)

its business greatly with a concentrate program for feeders.

DIRECT FEEDING—Obviously enough, more feed firms, some large as well as small, are their own best customers as they engage in directly owned and operated feeding enterprises, not just contracting. The reasons are pretty obvious—one being to assure tonnage or to offset tonnage losses when some customers decide to make their own feed. Another is control or better management. Another is marketing. A big one is use of capital. As one feed man said, "It ties up more capital but offers more control. If a feed manufacturer must find his tonnage through financing growing projects, he will eventually start raising his own. Then he can take the profit rather than just the losses. We now take all the losses. Why not get the gains, too?"

Here are a few examples:

A medium size manufacturer quit broiler contracting. Now, in addition to his regular feed business, including egg contracting, he is building his own laying houses and owns an egg marketing operation. . . . Another manufacturer has a 2,000-head feedlot and raises some of his own turkeys and processes turkeys. . . . Still another manufacturer, formerly selling strictly on a cash or financed basis to turkey growers, now accounts for a large part of his turkey feed tonnage on farms which he owns. . . . A company heavy in poultry feed and poultry operations also has farms and a couple of thousand head of cattle. . . . One manufacturer set up a special feeding department, has some feedlots and has money in a poultry operation. . . . A firm in layers and turkeys has independent producer business, contract operations and its own feeding operations. The feed man says costs are always somewhat lower when the firm feeds its own and has better control—to say nothing of the financing angles. . . . An experienced egg contractor owns all of his own hens, half on contract producers' farms and half on his own. He says the trend will be to more direct ownership and operation because of better control of quality and costs. . . . A broiler feeding firm has bought tracts of land for direct ownership and operation of automated broiler units. . . . Another broiler operator, mostly on a contract basis, says costs run lower on farms which the company rents and operates itself. . . .

A smaller manufacturer feels too many farmers do a poor job of both livestock and money management; he has thought at times of putting the capital required for his $100,000 accounts receivable into his own feeding operations. . . . There are many other examples, too, among dealers and manufacturers who now have their own feeding projects, perhaps more than some feed men realize. Some may be primarily for demonstration; in other instances it is a straight business venture; frequently it is both. An Illinois mill feeds 2,800 beef cattle. A Missouri dealer feeds 225 steers and 18,000 layers. A North Carolina dealer-mill has 2,000 pigs in confinement units near its mill. A Wisconsin mill keeps 4,000 layers, raises 100,000 broilers and produces 100,000 started pullets. Another mill raises 100,000 turkeys on its own farm. A southern feed manufacturer custom feeds cattle for a packer. Another feed manufacturer has a 10,000-head cattle feedlot. A western manufacturer feeds several thousand lambs annually.

INTEGRATION—As mentioned before, there no doubt will be a lot more integration before there is less, at least in poultry. This, of course, has various factors behind it—such as maintaining "captive" tonnage; marketing changes; narrower margins between farm and food market; specification buying in larger volumes; possibly more effective use of capital and facilities; integration to offset loss of feed volume to competitors or customers who make their own; integration near a plant if harder to serve distant markets. In general, of course, it is part of a trend in some instances to fewer and smaller margins or profits where several profits may have existed before.

Pressure for more integration in poultry continues to come from the feed and production end on one hand and the processing end on the other. Some feed firms get into processing, and some processors get into their own feed manufacture.

A broiler processor recently built a new mill and took on contract growers. Said the manager, "Any company that survives must acquire more control over its operations. This means getting into complete integration as soon as possible." Moving from the other direction, a couple of feed and poultry firms recently bought processing plants, thereby making complete packages from breeder hen to food store dock. Another feed manufacturer found that processors were tying up with certain contractors, eliminating possible markets for the manufacturer's contract-produced birds; the firm felt it had no choice but to acquire a processing plant.

A former president of the National Turkey Federation told cooperative processing people that they should consider expansion into additional arrangements for integration, including feed. It was his contention that processing cooperatives not offering feed service might lose their identity to large feed integrators who could control large blocks of turkeys and have a lot to say about processing. At the same time, some co-ops in the supply field feel it is their "mission" to do more in the processing and marketing field, too.

Frequently cited are the instances where larger manufacturers have sold feed to dealer-integrators, who then start to make their own feed, and the manufacturer starts contracting or growing himself.

Here's another sign of the times. One of the larger firms announced formation of a special growing and marketing department as part of feed sales activity.

Another factor in integration is the so-called "joint venture" operation, and some think there will be a good deal more of this. A feed manufacturer may share the risks with dealer-contractors. Also reported frequently during the past year have been joint business operations where two or more feed men, hatcherymen and processors or marketers combine capital in a joint poultry business of some type.

COORDINATION—There are continued reports of some programs to coordinate independent egg producers and promote and market eggs on a joint basis. Also, many firms now offer product marketing help of various types. Some claim coordinated programs work well. Others say they won't. One feed man said that over the longer haul, there won't be enough margin in eggs to warrant promotion programs and several margins. He said, "You can't stay in the broiler business in our area unless you can produce for less than 15¢ per lb. Eggs are going to be the same way."

In addition to various big egg production projects mentioned frequently these days, there continue to be coordinated programs. In one area, a feed firm, a breeder and a marketing firm joined to push egg production programs. Frequently flocks are owned by conventional farmers, but in some cases businessmen form corporations and hire managers. Apparently egg corporations in local communities are increasing, just as they have in the turkey field.

COURT CASE—Feed firms which help finance poultry projects may have risks other than just the credit angle, too. In a federal court case this year, a feed company sued a broiler grower and processor for unpaid loans and feed bills. The poultry operator countersued, alleging a net loss of $186,000 as a result of what he called false representations by the feed company regarding broiler business prospects. The poultry operator, in the jury verdict, was absolved of paying $145,000 in loans and feed bills and was awarded damages of $174,000. Another suit and countersuit in the poultry field also were reported recently.

FAILURES, TOO — Obviously, integration itself does not assure success, as many will say in regard to the past year of heavy production and low prices in broilers and turkeys. But even when prices were not low so long, some had problems.

A good sized firm involved in poultry financing went out of business when bank credit was halted after losses had been sustained. Another fair sized firm in poultry operations was being liquidated.

The head of one company which had a feed and poultry division, with big and extensively integrated operations, put the whole works up for sale and said frankly, "We made the mistake of trying to start too fast in a new business with a shortage of trained personnel. The feed and poultry operations have lost money consistently. We will have to sell them at a loss, but it will be worth it to get rid of them."

Some feed men have warned, too, that all is not sweetness and light when a feed firm decides to get into areas where it is not experienced, including poultry or egg processing and marketing.

MERGERS AND ACQUISITIONS—One significant development in the general field of integration, financing and marketing is mergers and acquisitions.

For example, in Delmarva, two major firms merged the past year to form one of the largest integrated poultry operations, accounting for 20 million birds a year. A firm with two hatcheries and a modern feed plant and growers joined with a processor to bring about an operation that covers everything from hatching egg to the finished poultry product. It's another move to help ease the problem of narrow spread between cost of production in the field and the price the consumer pays for chicken. A major merger of a contract producer and a processor also was announced in the South. And some integrators announced acquisition of processing plants.

Attracting the most attention the latter part of the year was a major feed firm's acquisition of some poultry production and processing firms, with more announcements of similar acquisitions expected.

FINANCING—It takes a lot of money these days to do anything in animal agriculture. So, in addition to mergers and other methods of increasing capital, how do you get money from a lending agency for your feed or integrated operations? A banker familiar with the feed business points out that a record of successful operation and specific plans for the future continue to be key factors. In addition, he emphasizes that a basis consideration is this: A business which can show that it will produce or contribute to the production of quality end products for less than average costs is in a good position to obtain financing and investment money. For example, he told midwestern feed men that money could be had if they could show how

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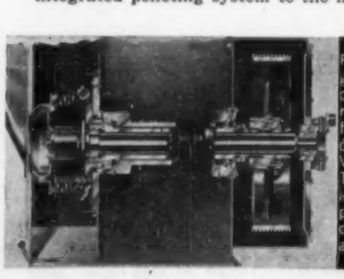

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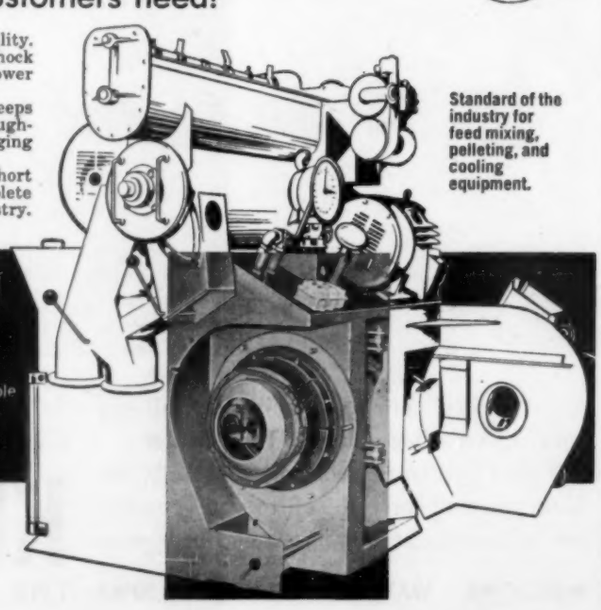

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they could produce or help produce beef for 17 or 18¢ per pound instead of 22¢, or broilers for 14¢ instead of 15½¢.

Of course, one trouble currently in this era of new operations is that the other guy doesn't immediately roll over and play dead just because you can produce more efficiently. And we wind up with heavy production and low prices.

The banker, by the way, predicted more use of outside investment money in feed and animal production—such as sale of stock to the public by larger firms, or spreading of ownership among local businessmen and farmers. For one thing, having other businessmen as owners and directors gives more depth of management and greater community interest.

The classic case of public investment is Arkansas Valley Industries, a big completely integrated broiler production and processing operation which also has got into eggs and may get into other livestock fields to some extent. This firm, including several subsidiaries, covers all aspects of production and marketing. The various segments which were put together supplied some of the equity, and the organizer went to the public for additional capital. The year before this business was started, the group involved had a collective loss. After the first year's operation, a profit was reported, and a quarterly statement some time ago cited some net profit even when the broiler price averaged 13¢.

Other feed men get some public investment, too. A firm building a $250,000 feed mill sold $100,000 worth of stock to local businessmen. Another company with a new mill sold $50,000 worth of stock to local farmers and business people. And, of course, in the South, many are the cases of local bond issues to build facilities to be used by integrated poultry operators.

In view of the upswing in integrated types of operations, a banker, commenting on the importance of financing and credit, said there are now three key positions in the feed industry: (1) The credit executive responsible for intelligent application of financing; (2) the production executive responsible for creation of the most productive feeds at least cost, and (3) the end product marketing executive who must arrange for consumption of products from integrated projects.

Much of the above has dealt with financing and capital for feed and integrated operations. In addition, of course, there is the continuing question of financing and credit for feeders.

Some say that financing, based on recent experiences, undoubtedly is being tightened, but some look for little or no change and feel that the feed industry will continue to be a major source of feeder financing, even with efforts to increase participation by banks and others. Mentioned frequently is the need for complete farm financing programs, not just credit or financing for feed for a particular group of animals or birds and other things.

One feed man said that while it would be good if banks provided more financing, the provision of financing is still a sales tool, and he contends that proper use of it by a feed company, which can obtain money at lower rates and then lend it out for more, can be profitable for the feed firm as well as helpful for the producer. Another feed man asked why the feed industry shouldn't be able to provide financing and get a return on it, just as appliance firms and others do.

In any event, financing is getting much more involved. And if a feed firm doesn't get into integrated operations itself, it may in effect be providing continuous working capital for producers or integrators, instead of conventional financing, and it may be making capital loans for production or processing facilities. The companies may look at credit and financing more like an investment.

So far as more conventional credit is concerned, some firms have adopted cash discount programs which help cut down on credit or steer credit-seekers to banks.

EQUITY FINANCE—Speaking of investment (as just above), equity involvement of feed manufacturers in feeding operations or integrated projects seems to be increasing in either action or plans. As one feed man said, contract production or equity participation—investing money in an operation and not just lending it—may be

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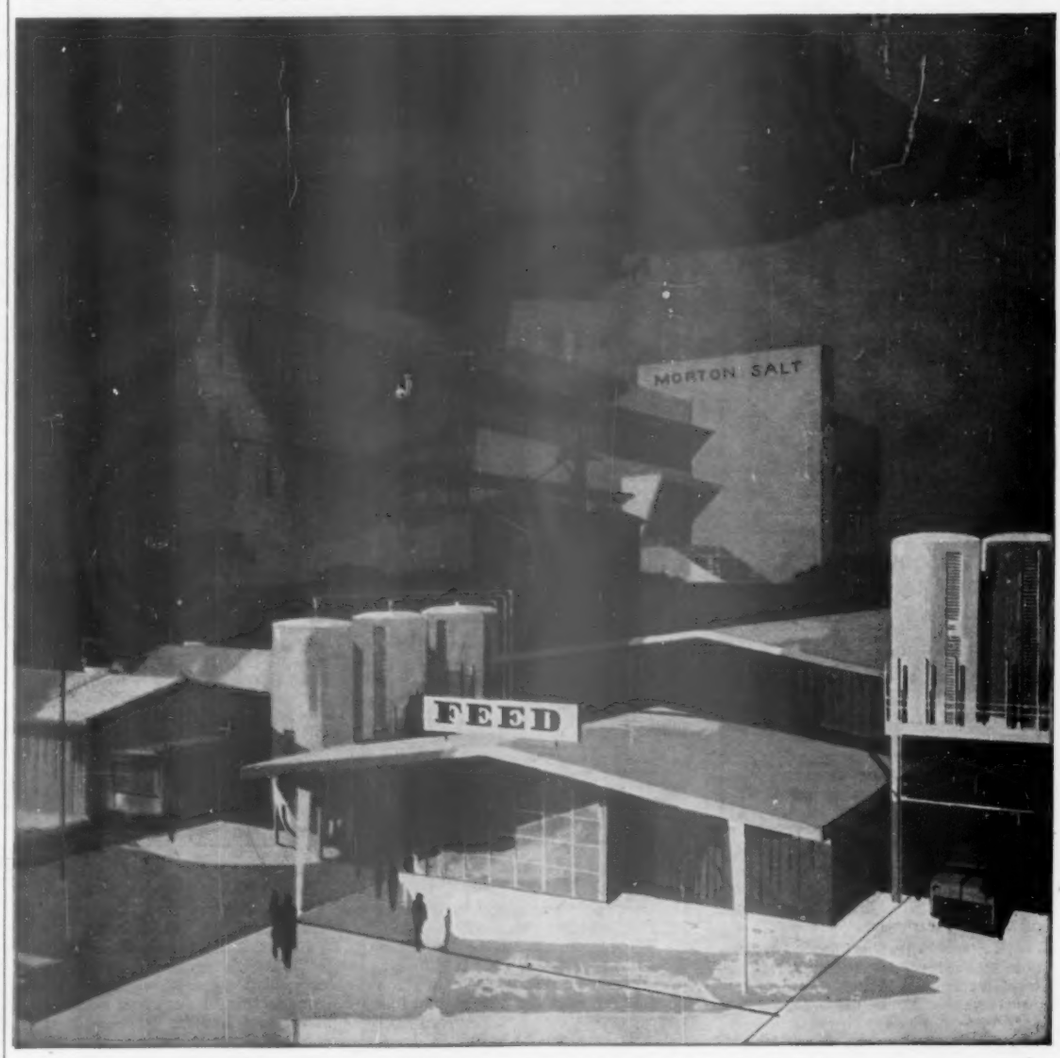

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a sounder approach to volume business than large scale credit extension to producers with limited net worth or working capital.

For some time, there have been instances of feed salesmen and executives who have money in projects. And some look for more feed firms to invest in poultry projects in particular, along with hatcherymen, processors, food interests and others. Already one can cite specific instances where feed company executives are on boards of directors of poultry producing and processing firms.

We have cited cases where some feed firms, particularly in the South, own parts of poultry producing and marketing operations. Also, one finds instances of feed men owning shares in local turkey producing corporations.

MARKETING — Developments in end product marketing are many, with more informal or formal ties between production and marketing, including marketing agreements between independent producers and cooperative or private agencies as well as contract production. Many of the new developments are in eggs.

In this connection, a couple of contrasting views are of interest. A major feed firm said its marketing tests showed that advertising could build consumer preference for a branded egg. But, said the company, the problem of overcoming food chain opposition to a special brand is difficult, and it was said that costs are too great to be met from feed margins of most processors. Another feed man said that one can build up good demand initially but that it is hard to hold it and that it is costly. Some others also questioned whether branded eggs on a large scale or over a wide area will be successful. Some of them say feed firms should help find markets and may engage in marketing to some extent and may use their name in marketing but that a major branded promotion effort will be difficult on eggs as well as on other commodities like many meats.

However, there are some branded egg programs, and attracting the most attention was a project in the Northeast, where a poultry group helped set up a private stock corporation, which will advertise and promote and market quality-controlled poultry products under its own brand. The brand will be franchised to selected processors and distributors. On eggs, a 4¢ per dozen premium to consumers is planned. Of this, 2¢ will be returned to the corporation, 1¢ to the producer and 1¢ to the packer. Two feed manufacturers are among the directors.

Another somewhat unusual development is a program where a consulting firm coordinates production and marketing of eggs and swine. In addition to consulting on feed formulation and production (with base mixes used for farm mixing), the coordinator arranges for end product markets.

As production in some instances gets more integrated or as efficiency improves among independent producers, there may be more emphasis on marketing contracts than on production contracting. That is, large scale independents or groups of producers will find it increasingly important to have pre-determined outlets, particularly as fewer and larger buyers or processors want quality-controlled production of certain quantities. This, of course, has already gone a long way in some areas.

There are now more instances of marketing arrangements in eggs. For example, a group of Iowa egg producers has an agreement with an Ohio produce firm to handle and market eggs in the East. Some major cooperatives also have marketing agreements with producers of poultry products, in some cases requiring also that the producer use the co-op's feed.

Presumably feed firm involvement in processing and marketing will continue to vary. In one area, producers, as individuals or in groups, will market their own eggs to pre-arranged outlets, while in others feed firms will be directly involved in egg processing and marketing, including integrated operators. Meanwhile, it appears that some feed organizations may now be taking a go-slow approach to direct involvement in marketing, while others maintain a strict hands-off policy, concentrating on feed and leaving end product marketing to specialists in that field.

Some forecast more pre-determined outlets and contracts between producer and processor. It was reported that in a big new egg program, there would be a contract between producer and processor in which price would be geared to production cost factors, including feed, with escalator provisions.

POULTRY — A few developments in specific fields, other than the general developments, may be pointed out. In poultry, some of these include:

Broilers—The major broad developments, of course, include proposed government controls, the low price and loss situations, mergers, acquisitions, etc.—things into which this report is not getting.

One of the points of interest is regional competition and efforts to lower freight rates on ingredients. What if production costs are significantly higher in one area? One example is Maine, which has a net cost disadvantage with respect to the New York market which amounts to 1.2¢ per pound compared to Delmarva and Georgia. Because of this, Maine can compete only on the basis of obtaining a premium price, and this it has been able to do, partly on the basis of superior quality, not just being closer to market. The future of the industry in such an area is said to depend on putting out a premium product and restricting production to the limitations of this type of market.

Broiler programs in the upper midwestern area received considerable attention but now presumably have been cut back. These have been based mostly on cooperation among feed company, hatchery and processor, who join in offering a guaranteed price to the grower. Some claim this type of program will work; some veteran southern operators have their doubts. Some say total production costs might average 15¢; others indicate actual costs will run higher. One feed man said feed cost advantages over the South may not be the $6 to $8 per ton claimed, at least if prevailing feed production and distribution systems are used.

However, over the longer run, some say that grain surplus areas should become strongest in poultry production. This would be based on new developments in processing and marketing the end product, making it easier to produce and ship from areas of lowest cost.

Layers—One could list new egg production and marketing programs and projects—some of very large size, some with and some without feed company involvement—almost by the dozen. It appears that big egg operations have developed faster than many feed men themselves realize. And, if they stay in business, they are bound to displace a lot of farm flocks.

Egg contracting, of course, has become prevalent in some areas. In Mississippi, more than 90% of commercial egg production is under some sort of contractual program. More than half of the laying flocks in Arkansas are on a contract basis.

In addition to individual feed firms which may contract or have their own farms, there are more joint ownership projects, as mentioned previously. For example, one corporation

was formed with ownership split three ways—50% by a feed company, 25% by a hatchery, 25% by a marketing firm. Producers are on a contract basis and are paid a certain amount per 1,000 birds, plus a certain amount per dozen. . . . A midwestern produce firm and feed company joined in a project aimed at 500,000 layers. The produce firm is now a feed dealer, and the feed company now helps on pullet purchasing and feed financing. Premiums to producers include 2¢ for feeding the company's feeds, 1¢ per dozen cooler premium plus a quality premium related to volume. . . . Another operation with a half million layers includes feed mill, processing plant and contract producers of pullets and eggs, with producers of eggs getting a certain amount per 1,000 layers per month. . . . Some firms are now involved in contract production of eggs for breakers. In Arkansas, two feed men are part owners of a breaking firm. . . . There are many other special projects and programs functioning or in the planning stage, involving various arrangements for production—ownership, leasing, contracting, etc.

One feed man whose firm has tried various types of coordinated or integrated egg programs has some pointed remarks on types of programs. If one is involved at all, his view is that complete control is a necessity. He says half-way measures won't work. "You've got to have a boss-worker relationship to make it work," he contends.

Turkeys — It almost seems to be that you aren't anybody in the turkey business unless you are involved with at least a million turkeys on an ownership, contracting for financing basis. At any rate, if one adds up birds accounted for by some of the important feed and financing firms, contract producers and owner-integrators, he comes up with a very large number of birds accounted for by not too many firms or groups which provide much of the financing or working capital in one way or another. In addition to conventional financing, more integration and contracting seem to be in the works, with or without government controls; some claim it will go faster if there are controls; others say marketing orders will help prevent this.

To show how things can develop, a medium size firm which has provided conventional financing only is now considering contracting or building its own houses, feeling that results would be better and that profits as well as losses could be taken.

In addition to feed company involvement, there now are several integrated corporate set-ups of substantial size. One of these moves up to a million birds a year, including farms, hatcheries, breeder flocks and feed mills, all in a number of separate corporations.

A western feed man said an ideally integrated turkey program would look like this: Poults will be obtained from breeder hens owned by the integrator and hatched in his own hatchery. Meat turkeys will be placed on ranches owned or leased by the integrator and grown by salaried employees. Feed will be produced in mills owned by the integrator. Processing will be in plants owned or controlled by the integrator. Marketing will be done by the integrator under a quality label or custom pack, with much of it sold in advance on a specification basis. There will be only one profit on all of these phases of production. Production costs in this area will drop to the point where 19¢ toms and 22¢ hens will be profitable.

LIVESTOCK AND DAIRY—Most seem to feel that integration and contracting will not go fast or far in livestock, at least in the Midwest, although there have been quite a few hog contracting operations in the South.

Plans for one big completely integrated hog operation, with a stated aim of 100,000 hogs annually, were announced in the Corn Belt. Some also say that, with better disease control, more large scale feeding operations can be expected.

One midwestern firm has had an experimental hog contract program going. Farmers are furnished with feeder pigs, which they feed out. After marketing, the firm gets paid for the feeder pig and feed, and the farmer takes the profit. There is a no-loss guarantee.

In beef cattle, a number of feed firms now have their own feedlots, but some feel that contracting as such is not likely to increase because of capital requirements and the opportunity to make only a small part of the total ration, at least in some areas.

For the feed industry, one of the major problems has been the fact that big operations often make their own feed, and some feed men have tended to "kiss off" this business. However, some may be making new efforts to sell at least the concentrate or super concentrate or premix part of the ration, or even make the complete feed for nearby feedlots.

One firm entered into a cooperative agreement with a cattle feeder by helping finance purchase of calves and feed. Profits are split. More of the same is planned.

Also, of course, developments in grain rolling and supplementation of "all-concentrate" rations have been significant for the feed industry in some areas. Similarly, some have been successful in making complete pelleted rations for ruminants for nearby feedlots.

In the dairy field, there now appear to be new opportunities for the feed industry, and some firms are strongly pushing on this business. This includes higher energy feeds for high-producing cows, heavier concentrate feeding, pelleted grain rations for milk parlors, and forage testing. In one state, special meetings were held among feed men to show these opportunities.

For a time, there seemed to be quite a bit of interest in cow pools, where the owner of the cows would pay the pool operator to feed, milk and market milk. The most famous such project actually turned into a big dairy operation in which outside persons invested money and which was not operated on a pool basis.

Going back to swine —a number of feed men now help arrange for sale of feeder pigs, and some raise and sell them. Some think this will increase as specialization gains.

CONTRACT TERMS—Most broiler contracts probably are still geared to a per pound or per 1,000 bird basis, with payments related to feed conversion. At any rate, here as in other contracting, there has been more emphasis on efficiency. Also, while not all agree, at least some are relating payments to market price, the idea to share risks more.

One broiler contractor dropped his $60 per 1,000 bird guarantee to broiler growers and went to a share-the-risk arrangement. Hatchery, feed mill and grower split profits after all items at cost are deducted. If there is a cash loss, the mill and hatchery absorb it, and the grower loses his labor.

In contract egg production also, there are a good many systems of payment, some on a per dozen basis, some on the basis of so much per 1,000 birds, and some on other bases or combinations of bases. Here, too, at least some have related payments to price as well as production rate and feed efficiency. One feed man who has paid 6¢ per dozen on grade A eggs, with a split on profits, said he felt it would be necessary to work in more incentive provisions. One southern dealer pays the producer exactly one seventh of the egg price. One plan gears payments to production rate—2¢ per dozen when production rate is up to 60%; at 60 to 65%, another ½¢; at 65 to 70%, an additional ½¢; at 70 to 75%, another 1¢; at 75% and up, an additional 1¢—plus a split on profits after deduction of feed and other costs.

SPECIAL PROJECTS — Many are the special projects and services which some feed men have.

An eastern firm has a poultry marketing specialist who helps producers with marketing programs; also this firm helps producers market live fowl, resulting in better average prices. . . . Some cooperatives as well as others have moved into processing of poultry products as well as eggs, including development of new poultry products. . . . Project or corporation growing of turkeys has become a big thing, with a feed firm frequently part of the corporation. . . . Some have package egg programs, including recommendations and help in obtaining financing for housing as well as financing of chicks and pullet feed. . . . Several feed companies are distributing pen record books developed by a poultry association as part of a new poultry business system. . . . Quite a number of feed men are producing started pullets themselves or on a contract basis for independent producers or for their own or other egg programs. One feed manufacturer now produces 1½ to 2 million started pullets annually on a contract basis.

A feed company is acting as a clearing house in production and use of feeder pigs—helping feeder pig producers obtain good breeding stock, helping obtain buyers of feeder pigs, and providing a standard pricing and contract form. . . . Some are putting out breeding stock on a lease basis of some type. One feed man acquires breeding stock and leases the animals out to farmers who will provide feeder pigs for the firm. . . . One firm for a time operated a hog "motel," feeding out hogs for farmers at a certain charge per day, plus cost of feed. . . . SPF pigs may be another important factor in the swine feed business.

Some feed companies are offering more in the way of prescription feeding services, including forage analysis in the case of ruminants. . . . Some cooperatives have a special computer service for dairy feeding recommendations based on many factors. . . . Quite a number of firms are now selling systems and programs as much as feed itself, and one manufacturer has developed and sold certain types of livestock equipment. . . . Quite a number of feed men have heifer programs, raising heifers for dairymen and being paid for care and feed. . . . Some companies have not given up on business among operators of large feedlots. Some have made a success of pelleted feeds for nearby feedlots. Some have emphasized more "concentrated" concentrates or premixes. One firm has a special statistical and information service to help the individual feeder improve his own program.

Some feed companies have moved into manufacture and/or distribution of their own lines of animal health products and other farm supplies, and at least some additional moves in this direction are expected. . . . One mill operator, after being burned in poultry, turned to dog food manufacture for a limited area and says the business is thriving in spite of stiff competition from national and leading brands. Others, too, have put more emphasis on pet food. . . . More attention to other higher margin products like starters, milk replacers, fish food, laboratory animal foods, rabbit feeds, etc., has been noted in some cases. A few are looking into commercial production of fish in a way similar to poultry.

CONCLUSIONS—In general, what can be expected?

1. There will be still more vertical integration, particularly in poultry. Capital requirements may be too great and opportunities for improvements in efficiency of production and marketing and in feed volume too slight to make it go fast in livestock. Meanwhile, with or without integration of production, there apparently will be more specification buying, more agreements or contracts between producers and marketers or processors, with outlets predetermined.

2. More feed men will be their own best customers as they get directly into their own feeding operations. However, some are sticking to contracting; they still won't or can't invest large sums in production facilities. Also, apparently more firms will become involved in production of end products in an equity way, where part of the producing or marketing operation is owned by the feed company.

3. There may be more acquisitions and mergers, including integrated operations. However, some present integrators feel that they can produce for less than some organizations which may develop or expand "captive" business and that, under normal price and other circumstances,

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OKLAHOMA IS JUDGING WINNER—The Oklahoma State University, Stillwater, team took top honors at the 32nd annual inter-collegiate meat judging contest held in Madison, Wis. Pictured presenting a $1,000 first place award for meat research from Chas. Pfizer & Co., Inc., is Dr. Wid Crawford, left, animal nutritionist for the firm. Accepting, center, is team coach Dr. L. E. Walters. Members are Rodney Orrell, Carnegie, Okla., second from left; Hugh Halsey, Piney Creek, N.C., second from right, and Jack Tucker, Mullen, Neb., right. Mr. Halsey was highest scoring individual in the contest with 934 points out of a possible 1,000. The contest is held annually in connection with the International Livestock Exposition conducted at the same time in Chicago. The contest was held at the Oscar Mayer Co., Madison.

they can maintain a strong position.

4. There will tend to be less of the "in-between" type of operation, especially in concentrated production areas. That is, on the one hand, there may be strong operators moving still more deeply into integrated or coordinated arrangements. On the other hand, some will specialize in feed, doing a minimum of financing and concentrating on making and distributing feed, and at still lower margins in some areas.

5. Some of those specializing in feed will still provide management advice and other services. There will be more "program" selling, including marketing as well as production help. However, in other areas, feed is more and more a production product which cannot carry expensive sales and service costs. In some areas, one feed man said, sales and marketing costs that seem essential today will give way under pressure of the total economics of producing the end product, and the feed man can figure on at least 50% more tonnage per man and per dollar of expense by 1965.

6. Possibly, in some instances, we are going through a cycle which will find some return to specialization again. Some big producers, as they concentrate capital and effort in large specialized operations, may leave with or turn feed supply problems back to efficient specialists. As an industry becomes more efficient, it is less easy to find opportunities for new efficiencies and new programs. In part of the vegetable growing and processing field, it has been noted, the move has been away from vertical integration and back to specialization of growing on one hand and processing on the other.

7. Some independent producers, with efficient production and marketing, will stay in business. All operators have overhead and costs of doing business. Integrators have certain advantages but they won't take over entirely.

8. Emphasis on farm as well as feed production efficiency will continue. This is apparent in some feed company service programs to help get more out of the feed. Also, integrated or not, you can work like crazy to save 50¢ per ton in feed production costs and then lose the equivalent of $5 per ton in inefficient farm production. As one integrator said, "I'll mix feed with a scoop shovel, but if I have the best growers, I'll beat the pants off my competitor." This also may show up more in conventional financing in the future.

9. Area or regional competition will continue to be important. When an area gets rolling in all phases of production and marketing—such as the Southeast in broilers, or the Midwest in turkeys, or the Corn Belt in hogs—it is hard to slow the momentum which builds up. However, there should continue to be good markets for quality, efficiently produced and marketed products in any area in nearby markets, such as New England broilers in the Northeast or eggs in California.

10. As some have said, the feed and poultry industries as well as all of agriculture suffer to some extent from over-capitalization and overcapacity. Those with the most capital and ability to sustain temporary losses are in the best position to survive. But all managers must eventually answer to boards of directors and account for return on investment. Already, some multiple-product firms have pulled out of the feed business, and some companies have pulled out of or back from highly competitive areas. There have been a good many failures as well as successes in integrated operations. Many are the feed men who are happy to be in good hog or cattle or dairy areas and not in integrated operations.

11. Business mortality will continue to be high. However, those who can maximize their capital and efforts in the things they can do best—such as nutrition knowledge and application and feed manufacturing and distribution—who can do the best possible job in their primary function, should be in a pretty good position to survive and go forward. The industry long has had such activities as credit and warehousing among its functions, but its strongest basic point has been nutrition and feeding results.

12. As the AFMA chairman pointed out, with the position of the "middle man" in agriculture challenged as never before, perhaps individual feed men and the industry will have to intensify their efforts to sell the basic job which the industry can do, not only to feeders but to others, too. This means selling (1) quality of feed p r o d u c t s and continuing improvements in quality through research and milling technology, and (2) the economics of the i m p r o v e d product through better feeding results and better food products. This basic selling job is vital not only to individual firms but to the continuing existence of the industry as an important identity.

13. As we look at the industry, at its many ramifications and problems, we can conclude that the solutions will not be the same for all. As one feed man suggested in the outlook issue a year ago, "Specialize in the things you can do well. You can't whip the big ones by doing everything they do. You can't make your dollars, or your management, stretch. But you can whip them in your own area or specialized field by doing things better, faster, more effectively and more efficiently."

Dehydrators Group Announces Plans For Convention

LAS VEGAS—The American Dehydrators Assn. has scheduled its annual convention for Feb. 7-9, with convention headquarters to be the Stardust Hotel, Las Vegas.

The program, scheduled for Feb. 8-9, will range from a review of progress in 1961 to a projection of future growth and developments.

Among speakers who will address the convention are Dr. George Mehren Gianinni Foundation; Nelson R. Crowe, publisher of agricultural magazines; Dr. L. C. Cunningham, department of agricultural economics, Cornell University, Ithaca, N.Y.; Dr. D. G. Aldrich, dean of agriculture, University of California, Berkeley; Dr. J. R. Couch, professor of poultry husbandry, biochemistry and nutrition, A&M College of Texas, College Station; Dr. L. E. Hanson, head, department of animal husbandry, University of Minnesota, St. Paul, and Dr. J. H. Meyer, head, department of animal husbandry, University of California, Berkeley.

The program also will include a seminar on feeding, moderated by Dr. W. M. Beeson, professor of animal husbandry, Purdue University, Lafayette, Ind.

Registration will begin at 9 a.m. Feb. 7 in the South Lounge of the Stardust Hotel. A tour to Hoover Dam and other social events are planned for the first day.

Association directors for the coming year will be elected on the morning of Feb. 8.

The program is planned to provide ADA members with a cross-section view of the latest research findings and the newest marketing developments in the feeding industry.

Reservations for the 1962 convention should be made through the American Dehydrators Assn., Board of Trade Bldg., Kansas City, Mo.

Quiet Week Noted On Broiler Front

SALISBURY, MD. — Things were quiet on the poultry front the past week. Broiler egg settings and chick placements were normal and the price was reasonable.

The average price received in Delmarva was 16.92¢ lb. compared to 17.3¢ lb. the week before and 15.47¢ lb. a year ago.

Looking at the national situation, hatcherymen in the 22 reporting states set 47,349,000 eggs. This was 1% above the previous week and 1% above the corresponding week a year ago. Settings were up from the previous week in 12 of the 22 reporting states. Sizeable increases were reported in Georgia, Arkansas and Washington.

Placements in the 22 states totaled 33,134,000 chicks, up 2% above the previous week and 4% from the corresponding week a year ago. Placements were up in 15 of the 22 states. Appreciable increases were reported in Arkansas, Texas and Alabama.

Buys Vegetable Oil

WASHINGTON — The Commodity Credit Corp. has purchased approximately 112 million pounds of vegetable oil shortening, 52.8 million pounds of soybean salad oil and 35.2 million pounds of cottonseed salad oil for donation use outside the U.S., the U.S. Department of Agriculture announced this week.

Officials said the purchases are in accord with USDA's plan to complete a total donation of 400 million pounds.

Prices paid: 17 to 19.259¢ lb. for shortening; 18.283 to 19.484¢ lb. for cottonseed salad oil, and 15.685 to 17.04¢ lb. for soybean salad oil.

$1.25 CORN

(Continued from page 1)

boost the corn price to $1.25 in August next. The recent pig crop report gives some support to this price level. It would mean a firm hog-corn price situation prior to the 1962 congressional elections.

However, Dr. Cochrane has run headlong into an immovable body in the Bureau of the Budget, which is said to refuse his plans for a 1962 corn crop price support on the national average base of $1.30 bu. Scouts within his workshop now report that they are looking at a 1962 support level of $1.25 bu. Other feed grain prices would be in line with the corn support on the basis of feed value. Wheat is also being subordinately connected with this decision, but soybeans have been definitely excluded, with the probable objective of a reduction of the price support level for beans to $2.20 bu.

As USDA inner circles work over the legislative proposals for Congress, based on the key items mentioned above, it is also made known that USDA economists are studying a proposal which would take away from the private trade all government-financed exports of feed grains — returning them to the government monopoly which was reinstated when Harry Truman was elected in 1948. Later, when the grain export business was restored to the private export trade, the grand old work horse of the grain branch of USDA told this reporter that he was amazed at the great job the trade had done in moving government stocks in export markets.

However, the Cochrane philosophy of supply-management and its price control does not seem to tolerate any intervention of private trade, even in the export field—which seems appropriate if one accepts the Cochrane theories that supply-management of government surpluses is necessary to make production control activities in the U.S. effective.

Meanwhile, there has been a good deal of discussion of over-all farm program proposals, including cutbacks in grain production, marketing controls for dairy products as well as other commodities and a long-term program for land retirement.

Currently the national outlook is one of confusion. Bill Cochrane has fixed the economic pattern for the farm problem. Many believe that his feed grain program is going to be one of the most expensive in U.S. farm history.

The Cochrane theory is not basically different from that of the Benson administration except that he wants to pay more money to take out productive farm land than was the case in the soil conservation program of the Benson administration—plus the fact that Bill Cochrane seems to feel that if he can have the management of supply and demand, he can fix prices by turning off the faucet as he desires. He is now selling corn at the average rate of 40 million bushels a week from the feed grain program certificate pool.

It can be foreseen that by mid-March, he can close off the faucet and drive prices upward. Dr. Cochrane is now in full control of the feed grain market, and that is what the Kennedy administration espoused during the election campaign and something with which Mr. Freeman is now stuck, although one may wonder whether the dramatically eruptive secretary knows fully what he is talking about.

Going back to the export situation mentioned above—ending of private trade entry into the government export business and its exclusion except for specific dollar business for the feed grain export trade would be a shock to the major commodity markets—and this is a distinct possibility. The same situation would ultimately develop for wheat.

This would mean the end of the export subsidy operation which has existed under the fiction of the International Wheat Agreement and cut off all PL 480 and other programs for wheat as well as other grains wherein the private trade has played a major part under subsidized conditions.

The Freeman administration is repeating all the old yells of volume of exports of farm commodities, including feed grains under PL 480. The Freeman gang says, "We have done more."

One might say, so what? The PL 480 programs are largely give-away programs for our agricultural commodities which ultimately have to be written off on the CCC ledger as losses between the cost of acquisition and soft currency or subsidized price of sale . . . and it is now made known that the soft currency credit which the U.S. is said to gain must be discounted by 40%, since the deserving foreign claimants refuse to accept our food grain—or feed grain—exports unless the USDA will turn back 40% of the foreign currency cost for domestic use.

Senator's Disclosures

Wait until Congress reconvenes and hears Sen. Allen J. Ellender on this subject. It is learned here that he has written to USDA and the State Department calling attention to the fact that turn-back of foreign currency funds has increased from 7% four years ago to 40% during this current surplus give-away year. The Louisiana senator has indicated that he intends to put the use of accumulations of this uncertain-valued foreign soft currency on a congressional appropriation basis so that the eager beavers of Foreign Agricultural Service will not be tempted to make sales through heavy discounts or threats of foreign recipients —the use of that last word is advisable since we are not making sales but rather bargaining for an opportunity to give our agricultural assets away without any competitive factors against us.

The Food for Peace ritual is a soft-bellied operation where a lame duck congressman sits in an executive office day-dreaming about 2.5 million chicken farmers in Brazil, as his lame duck counterpart as secretary of USDA worries about the possibilities of taking over the whole Food for Peace show under USDA controls.

Another "flopperoo" of major proportions is this United Nations FAO proposal for establishment of a food bank in foreign nations to control starvation shortages. Well, one must pause and consider what might have happened if the UN food bank had a huge storage of grains or dried milk in the Congo when a relatively primitive people broke loose in rather savage warfare.

The 10-year record of the North American Grain Export Assn. discloses clearly that in the period of the great world cereal crisis, it never defaulted on a cargo and it made good in all parts of the world at the time of delivery ordered.

If we are to give our cereal grains or edible oils away in the immediate future, there seems to be no pressing evidence that we must store them at the backdoor of a potential conflagration—in a nation or embryo nation which cannot pay or does not understand that in some form or other payment must be made if they have control over the supply.

Commodity Prices Predicted for 1962

It has been said that hindsight is the most perfect science. How different things would be if feed men knew 12 months ago what they know now. But since that isn't possible, the trade must rely on forecasts. Here are some commodity price and supply predictions for 1962 gathered from numerous sources:

BROILERS—Some observers say the same forces which encouraged over-production in 1961 will remain in 1962. Even so, 1962 production is expected to be no more than 1961's and it has been ventured that at-the-farm broiler prices will average around 15½¢ lb. or 1½¢ under a year earlier in the first quarter of 1962 and maybe 15¢ lb., or 1¢ higher than a year earlier in the second quarter.

EGGS—Of major concern right now is the likelihood of birds in 1962 laying flocks exceeding numbers of a year earlier. Present hatching activity indicates continued interest in increasing the size of nation's laying flock. Broiler prices have improved, but the tendency for some broiler producers to switch to egg production may be a major factor. These prospective situations point to lower prices in 1962 than in 1961, maybe 5-6¢ under a year earlier in the first quarter of 1962 and 3-4¢ below in the second quarter.

TURKEYS—With the possible advent of marketing orders a big question, supply and price predictions are hazardous. Some observers expect 1962 turkey production to be 5-10% under 1961. If this happened, there's a chance the average farm price next fall would be near 21¢ lb., about 2½¢ above a year earlier.

BEEF CATTLE—Year's average prices expected to average out near 1961 level. Fed cattle prices probably will hold about steady through the winter, may decline in the spring and then level off near year-earlier prices in the fall.

HOGS—Stability in swine production for 1962 indicated by USDA's estimate of the 1962 spring pig crop being only 2% larger than the 1961 crop. Generally favorable corn-hog ratio for most of the new year. Many farmers have reduced their total corn production, may want to sell to government instead of feeding. Also, it has been indicated that a lot of producers can't raise more hogs unless they make some drastic changes in their operations. Prices probably will hover near 1961 points most of the year. May be some dips and climbs here and there. Big problem may come in 1963.

DAIRY—Lower milk prices in outlook. Too much milk pouring from nation's dairy cows. Government probably will further advance dairy product purchases in 1962 to support prices. Purchases in 1961 probably will add up to more than double those of 1960. Dairy producer quotas proposed.

SOYBEANS, SOYBEAN MEAL—Soybean prices expected to remain close to loan rate ($2.30 bu. for 1961 crop, probably the same for 1962 crop) during first nine months of 1962. Farmers said to be holding 1961 beans tightly and expected to put enough into loan program to make support price effective. Soybeans will be in surplus position in 1962, partly as a result of government's feed grain program which concentrated on cutting corn production. Carryover of about 90 million bushels next Oct. 1 likely. New supply of about 10 millon tons of meal expected in 1961-62 marketing year, up 6% from year earlier. Meal prices probably will average under the $60 ton level of 1960-61.

CORN—Agricultural economists say rate of corn sales by farmers, marketings by government and amount of 1961 corn farmers place under price supports this winter and spring are the three main factors that will determine future corn prices. Therefore, price prospects for corn are uncertain. But it has been guessed that the average price for the 1961 crop will be a few cents higher than for the 1960 crop.

The FEED MARKET

PRICE QUOTATIONS, MARKET TRENDS
OF PRINCIPAL INGREDIENTS

NOTE: Quotations on feed ingredients shown in these and adjoining columns are wholesale prices, per ton, bulk, for prompt delivery, unless otherwise noted. They are the latest quotations available from Feedstuffs correspondents and are not necessarily those in effect on date of publication. The prices represent fair average trading values and do not necessarily represent extreme low or high levels at which individual sales might have occurred. A descriptive summary of supply and demand factors prevalent in the feed market appears on page 2.

ALFALFA MEAL

Chicago: Demand and supply fair; trend firm; dehydrated, 17% protein, 100,000 units vitamin A $49.10@50.10.

Denver: Demand fair; supply ample; dehydrated $46, unchanged.

Buffalo: Demand and supply fair; trend steady; $66.10, sacked, Boston, unchanged.

Los Angeles: Demand fair; trend steady; supply adequate; dehydrated meal, 17% protein, 100,000 A $51@52; dehydrated pellet meal, 17% protein, 100,000 A $53@54; suncured meal, 15% protein $41@42; suncured crumbles, 15% protein $43@44; all unchanged.

Boston: Demand fair; trend fairly steady; supply ample; dehydrated, 17% pellets $55.50, off 50¢; suncured, 13% $48, sacked, unchanged.

Cincinnati: Demand fair; trend steady; supply adequate; 17% dehydrated, 100,000 vitamin A $52@54, unchanged.

St. Louis: Demand fair; trend steady; supply ample; dehydrated, 17% protein, 100,000 units of vitamin A, pellets $48.50, unchanged.

Ft. Worth: Demand fair for dehydrated, slow for suncured; trend steady; supply sufficient; sacked: dehydrated, 17%, 100,000 A $57, rail or truck, unchanged; suncured, 13%, ¼-in. grind, No. 1 $42@43, unchanged.

Seattle: Demand fair; trend firm; supply ample; suncured, 15% protein $40, Seattle, unchanged; dehydrated, 150,000 A units $47 Seattle, unchanged.

Memphis: Demand fair to good; trend steady; supply ample; dehydrated, 17% protein, guaranteed 100,000 units vitamin A $54.50, up 50¢; reground pellets $53.60, unchanged.

Kansas City: Demand fair; trend steady; supply adequate; 17% dehydrated alfalfa, 100,000 A pellets $46@48, reground pellets $47@49; 18% dehydrated alfalfa, 125,000 A pellets $47@51, reground pellets $48@52; 20% dehydrated alfalfa, 150,000 A pellets $52@58, reground pellets $54@59; all unchanged.

Minneapolis: Demand fair; supplies adequate; trend steady; 17% dehydrated alfalfa, 100,000 units vitamin A reground pellets $52; oiled reground $53.

ANIMAL FAT (STABILIZED)

St. Louis: Demand fair; trend firm; supply adequate; yellow grease 5¢ lb., delivered tank truck or cars ¼¢ higher.

Los Angeles: Demand steady; supply adequate; trend steady; 5⅝¢ lb., unchanged.

Chicago: Demand excellent; trend steady to 12½¢ up; supply fair; bleachable fancy tallow $6 cwt., yellow grease $5.62½ cwt., tank truck or carlot.

Boston: Demand good; trend firm; supply adequate; tallow 5⅜¢ lb., unchanged; yellow grease 5⅛¢ lb., up ⅛¢.

Ft. Worth: Demand good; trend firm; supply scarce; prime tallow, tank cars 5⅛¢ lb., drums 7@7½¢ lb., f.o.b. north Texas packing plants with returnable drums, unchanged.

Memphis: Demand fair; trend steady at the advance; supply adequate; yellow grease 5⅜¢ lb., nominal, up ⅛¢; prime tallow 6¢ lb., up ⅛¢.

Atlanta: Demand good; trend stronger; supply short; 5⅜¢ lb., f.o.b. Alabama and Georgia production points, up ⅛¢.

St. Paul: Demand good; supplies ample; price advanced ¼¢ to 5⅜¢ lb., f.o.b. producer's plant for bleachable fancy.

BARLEY FEED

Chicago: Demand good; trend firm; supply fair; $36, sacked.

Baltimore: Demand and supply fair; trend steady; $46.50, sacked.

BONE MEAL (STEAMED)

Chicago: Demand and supply fair; trend firm; $97.50, sacked.

Buffalo: Demand and trend steady; supply fair; $105, sacked, f.o.b. Buffalo, unchanged.

Denver: Demand fair; trend steady; supply ample; $110, small lots, unchanged.

Cincinnati: Demand good; trend steady; supply fair; $105, sacked, Cincinnati, unchanged.

BREWERS DRIED GRAINS

Cincinnati: Demand poor; trend lower; supply adequate; $48, down $7.

Chicago: Demand good; trend steady; supply fair; 26% protein $44.

Buffalo: Demand and supply fair; trend steady; $56, Boston, unchanged.

St. Louis: Demand good; trend higher; supply tight; 26% protein $47, up $1.

BREWERS DRIED YEAST

Buffalo: Demand good; trend higher; supply limited; $9.80 cwt., f.o.b. Buffalo, up 10¢.

Cincinnati: 9@10¢ lb., sacked, unchanged.

St. Louis: Demand fair; trend firm; supply ample; 9¼@10¢ lb., carlots, sacked; 10⅛¢ lb., ton lots; 11½¢ lb., less than ton lots.

Chicago: Demand fair; trend steady; supply ample; 9½@10¢ lb., carlots, sacked; 9¾@12½¢ lb., l.c.l.

CALCIUM CARBONATE

Chicago: Demand fair; trend steady; supply ample; fine grind, plain, 100 lb. bags $9.54; bulk, in hopper cars $7.54; bulk in boxcars $8.05; granular grind $1 premium.

Minneapolis: Fine grind, 50 lb. bags $13.75; 100 lb. bags $13; bulk, boxcar $11.50; bulk, hopper $11; coarse grind $1 premium, delivered Minneapolis.

Cincinnati: Demand fair; trend steady; supply adequate; $7@7.50 cwt., unchanged.

COCONUT OIL MEAL

Portland: Demand slow; trend steady; supply adequate; 20% solvent $66.20.

Seattle: Demand fair; trend firm; supply ample; solvent type $73, f.o.b. car, Seattle, sacked, unchanged.

CORN GLUTEN FEED AND MEAL

(All quotations for all cities are bulk basis, sacked basis $6 more)

Minneapolis: Feed $47.70, meal $74.70.
Atlanta: Feed $51.10, meal $78.10.
Birmingham: Feed $48.90, meal $75.90.
Boston: Feed $52.60, meal $79.60.
Chicago: Feed $41, meal $68.
Cleveland: Feed $49, meal $76.
Denver: Feed $51.30, meal $78.30.
Ft. Worth: Feed $51.80, meal $76.80.
Indianapolis: Feed $46.25, meal $73.25.
Kansas City: Feed $41, meal $68.
Louisville: Feed $47.65, meal $74.55.
New York: Feed $52.20, meal $79.20.
Norfolk: Feed $51.60, meal $78.60.
Philadelphia: Feed $51.80, meal $78.80.
St. Louis: Feed $41, meal $78.

COTTONSEED OIL MEAL

Los Angeles: Demand slow; trend steady; supply adequate; $65, unchanged.

St. Louis: Demand slow; trend steady; supply adequate; 41% solvent process $61.50, down 50¢.

Cincinnati: Demand poor; trend lower; supply adequate; $69, down $1.50.

Ft. Worth: Demand excellent; trend steady; light offerings especially for nearby; 41% old process $65, f.o.b. mills Ft. Worth, unchanged; solvent, 2% fat added $67, January, unchanged; $65.50, February-April, unchanged; loose hulls $13@15, unchanged.

Memphis: Demand fair; trend steady; supply ample; prime 41% protein, old process $63; new process, 41% protein $62; both unchanged.

Atlanta: Demand good; trend steady; supply limited; 41% $65, f.o.b. North Carolina, South Carolina and Georgia producing plants, unchanged.

CURACAO PHOSPHATE

New York: Minimum 14% phosphorus $43.50 sacked, $40.50 bulk, f.o.b. New Orleans, Jacksonville and Philadelphia.

DEFLUORINATED PHOSPHATE

Coronet, Fla.: Minimum phosphorus 18%, minimum calcium 31%, maximum calcium 34%, maximum fluorine .18%; guaranteed uniform analysis; carload $61.25, sacked, 100 lb. multiwall bags, bulk $58.25; truck load $62, sacked, in 100 lb. multiwall bags, bulk $59, f.o.b. Coronet, Fla.

Tupelo, Miss.: Minimum phosphorus 14%, minimum calcium 28%, maximum fluorine .14% $52, f.o.b. Tupelo in 100 lb. multiwall bags, $49 bulk.

Wales, Tenn.: Minimum phosphorus 18%, minimum calcium 33%, maximum 36%, maximum fluorine .18% $66 (or $3.67 per unit of P), f.o.b. Wales in 100 lb. multiwall bags, $3 less in bulk.

Butte, Mont.: Minimum phosphorus 18%, minimum calcium 32%, maximum calcium 36%, minimum fluorine .18% $81 (or $4.50 per unit of P), f.o.b. Butte, 100 lb. multiwall bags; bulk $78; truck lots of less than 10 tons $10 more, bagged or bulk.

Houston: Minimum phosphorus 19%, minimum calcium 32%, maximum calcium 35%, maximum fluorine .19% $69.38 net ton, f.o.b. Houston, 100 lb. multiwall bags; $66.38 bulk ($3.65 per unit of P).

Port Arthur, Texas: Minimum phosphorus 18%, minimum calcium 31%, maximum calcium 34%, maximum fluorine .18%, guaranteed uniform analysis, carload and truck load $65.75, sacked 100 lb. multiwall bags; bulk $62.75, f.o.b. Port Arthur.

Muscatine, Iowa: Minimum phosphorus 18%, minimum calcium 31%, maximum calcium 34%, maximum fluorine .15%, guaranteed uniform analysis, carload and truck load, $71.25, sacked, 100 lb. multiwall bags; bulk $68.25, f.o.b. Muscatine.

Cincinnati: 18% phosphorus, carlots $74.30, ton lots $84.30; 14% phosphorus, carlots $62.50, ton lots $72.50, Cincinnati, unchanged.

DICALCIUM PHOSPHATE

Chicago: Bulk, carlots and truck loads, 18½% phosphate $78 and 21% phosphate $89; packed in 100 lb. papers, 10 tons or more, 18½% phosphate $81 and 21% $92; lesser quantities, 18½% phosphate $91 and 21% $102; above prices per ton, f.o.b. Chicago Heights, Ill., or Nashville, Tenn.

Bonnie, Fla.: Minimum phosphorus 18½%, granular, $81 (or $4.38 unit of P), freight equalized from nearest producing point, carload basis; bulk carloads $3 less; in truck loads of less than 10 tons, $10 more. Western slope prices, for delivery at established railroad stations and by truck at regular feed mixing plants: California, Arizona, Nevada and Utah, $99.90; Washington, Oregon, Montana and Idaho, $107.16; bulk carloads $3 less; truck loads less than 10 tons, $10 more.

Columbia, Tenn.: Minimum phosphorus 18.5%, minimum calcium 24% $81, f.o.b. Columbia, in 100 lb. multiwall bags; freight equalized with nearest producing point, carload basis; bulk $3 ton less.

Texas City, Texas: Minimum phosphorus 18.5%, minimum calcium 20%, maximum calcium 23%, maximum fluorine .12%; carload and truck load $75.50 sacked, in 100 lb. multiwall bags, bulk $72.50, f.o.b. Texas City.

Trenton, Mich.: 18½% phosphorus and 23% calcium, bulk boxcar/hopper car $78; bagged $81; 21% phosphorus product production discontinued.

Los Angeles: Demand fair; trend steady; supply adequate; 18½% phosphorus $95.10, sacked, unchanged.

Cincinnati: 18½% phosphorus $88.80, bagged in carloads; $98.70, bagged in ton lots, f.o.b. Cincinnati; $81, f.o.b. production points; unchanged.

DISTILLERS DRIED GRAINS

Buffalo: Demand fair to good; trend steady to higher; supply fair to poor; $63, nominal, Boston, up 50¢.

Cincinnati: Demand fair; trend steady; supply fair; $52, unchanged.

DRIED BEET PULP

Ft. Worth: Demand slow; trend steady; supply sufficient; molasses $59, sacked, January through June, up $4.

Atlanta: Demand fair; trend steady; supply good; $53.40, sacked, delivered.

DRIED BUTTERMILK

Chicago: Demand fair; trend firm; supply ample; medium acid $11.50 cwt., sacked; sweet cream $11.50 cwt., sacked.

DRIED CITRUS PULP

Atlanta: Demand good; trend steady; supply fair; pulp $30@32.50, sacked; meal $27.50@30, sacked; both f.o.b. Florida processing plants, unchanged.

DRIED SKIM MILK

Cincinnati: Demand fair; trend steady; supply adequate; 12@13¢ lb., sacked, unchanged.

Chicago: Demand good; trend firm; supply light; $14.25 cwt., sacked.

DRIED WHEY

Chicago: Demand quiet; trend steady; supply fair; $4.65 cwt., sacked.

Cincinnati: Demand fair; trend steady; supply adequate; $5.75 cwt., sacked, unchanged.

FEATHER MEAL (HYDROLYZED)

Ft. Worth: Demand good; trend firm; supply very limited; 85% protein $90, nominal, sacked, delivered Ft. Worth, unchanged to $2.50 up.

Atlanta: Demand good; trend stronger; supply short; $90, f.o.b. Alabama and Georgia production points, up $1.50.

FISH MEAL

Chicago: Demand good; supplies hard to get; menhaden, East Coast $118@120, Gulf $118@120; scrap, East Coast $114@116, Gulf $114@116; Canadian herring $1.65@1.75 a unit of protein.

Portland: Demand fairly active; trend unchanged; supply tighter; $1.88 a protein unit, sacked.

Los Angeles: Demand slow; trend steady; supply adequate; local production, 60% protein $1.80 a unit, unchanged.

Buffalo: Demand quiet; trend steady; supply limited; 60% protein menhaden $133, f.o.b. Buffalo, unchanged.

Denver: Demand slow; supply short; $1.80 a protein unit, West Coast, unchanged.

Boston: Demand and supply good; trend firm; Peruvian 65% $118 cars, $120 truck loads, both unchanged.

Cincinnati: Demand fair; trend steady; supply adequate; $113.10, unchanged.

Atlanta: Demand good; trend steady; supply limited; 65% Peruvian $112@113.50, sacked; 60% menhaden $120, sacked; both Atlantic and Gulf ports, unchanged.

Seattle: Demand and supply fair; trend easy; Canadian production $1.85 a unit protein, f.o.b. truck, Vancouver, sacked, unchanged.

Minneapolis: Demand good; supplies fair; Canadian herring $1.75 protein unit for January through June, $1.80 for April through June, f.o.b. West Coast; 60% West Coast blended steady at $138.

LINSEED OIL MEAL

Portland: 34% solvent, no quotes available.

Los Angeles: Demand slow; trend steady; supply adequate; local production, 31% protein $71, unchanged.

Boston: Demand slow; trend steady; supply fair; 32% $82.20, unchanged.

Buffalo: Demand fair; trend steady to higher; supply fair to poor; $65.50, Minneapolis, up 50¢.

Chicago: Demand good; trend strong to 50¢ up; supply light; Minneapolis basis: solvent $65.50, expeller $66, nominal.

Denver: Demand fair; supply ample; $61.50, up $2.50.

Cincinnati: Demand poor; trend higher; supply adequate; new process $66, up $2; old process $66, up $2.50, Minneapolis.

Seattle: Demand fair; trend steady; supply ample; 31% protein $90, delivered, carloads, sacked, unchanged.

Minneapolis: Demand good; supplies still tight; prices up 50¢; both 34% protein solvent and 32% expeller are $66.

MEAT AND BONE MEAL

St. Louis: Demand good; trend higher; supply tight; 50% $86, up $1.50.

Portland: Demand fairly active; trend fully steady to firm; supply ample; 50% $77.50, sacked.

Chicago: Demand fair; trend unchanged; supply ample; 50% protein $90, sacked.

Denver: Demand good; supply scarce; $75, down $1.

Buffalo: Demand fair; trend very firm; supply scarce; 50% meat scraps $95, f.o.b. Buffalo, unchanged.

Los Angeles: Demand good; trend steady; supply moderate; 50% protein $1.65 a unit, unchanged.

Cincinnati: Demand excellent; supply very short; trend strong; 50% meat and bone scraps $85, Cincinnati, up $2.50.

Boston: Demand good; trend firm; supply adequate; $1.35 a protein unit, up 5¢; converted 50% $89.50, up $2.50.

Ft. Worth: Demand good; trend firm; offerings light; meat and bone $80 bulk, $82.50 sacked, f.o.b. Ft. Worth, unchanged.

Seattle: Demand good; trend steady; supply ample; $1.55 a unit protein, ex-processing plant, sacked, unchanged.

Kansas City: Demand slow; trend steady; supply ample; 50% meat scraps $82.50, unchanged.

St. Paul: Demand fair; supplies ample; price range up $1@2; $92@94.

MEXICAN PHOSPHATE

Brownsville, Texas: Mexican natural ground rock; 13% phosphorus $39 sacked, bulk $2 less.

MILLFEED

Chicago: Demand excellent; trend very strong, up $2.50@5; supply light; standard bran $45@46.50, standard midds. $47.50@48.50, red dog $49, nominal.

Buffalo: Demand fair to good; trend higher; supply poor to fair; bran $48.50, up $5.50; middlings $49, up $5; red dog $52.50, up $3.50; all prices f.o.b. Buffalo.

Cincinnati: Demand fair; trend higher; supply adequate; bran $50, middlings $51, both up $3.

Boston: Demand active; trend firmer; supply light; bran $55.60, up $3; middlings $56.60, up $4.50.

Denver: Demand real good; supply limited; shorts $47.25, up $3.75; bran $47.25, up $3.75; bulk millrun $47.25, up $3.75.

Portland: Demand moderate; trend strong to higher; supply tight; mostly $42.75.

Los Angeles: Demand steady; trend firmer; supply of millrun limited, bran ample; standard millrun $48@48.50, unchanged to 50¢ higher; red bran $59, up $4@6.50.

St. Louis: Demand good; trend firm; supply tight; sacked bran and shorts $47.50, up $2.50; bulk bran $45.50, bulk middlings $46.50, up $5.

Seattle: Demand good; trend firm; supply limited; $43, delivered, common transit points, carlots, unchanged.

Memphis: Demand fair; trend steady to lower; supply ample; wheat bran $49.50, up $6.50; gray shorts $50.50, up $6.50; standard midds. $50.50, up $7.

Kansas City: Demand fair; trend steady to higher; supply tight; sacked bran $42.50@43, up $2.50; sacked shorts $42.50@43, up $2.50; bulk bran $41.50@42, up $4; bulk shorts $42.50@43, up $5; bulk middlings $42.50@43, up $5.

Minneapolis: Demand good; supplies still tight; trend higher; sacked bran up $1 to $45; sacked middlings up $1 to $46; sacked red dog up $2 to $48.

MOLASSES

Los Angeles: Demand good; trend steady; supply ample; $23.50, f.o.b. tank cars; $23.75, f.o.b. tank trucks, both unchanged.

Denver: Demand fair; supply ample; $31.70, tank car, unchanged.

Buffalo: Demand and supply fair to good; trend steady; 16½¢ gal., f.o.b. Albany, unchanged.

St. Louis: Demand fair; trend steady; supply ample; blackstrap 12¼¢ gal., tank cars, New Orleans, unchanged.

Cincinnati: Demand fair; trend steady; supply adequate; 12¼¢ gal., New Orleans, unchanged.

Boston: Demand fair; trend steady; supply good; tank cars 16½¢ gal., unchanged.

Ft. Worth: Demand good; trend steady; supply sufficient; blackstrap 13¢ gal., f.o.b. Houston, truck $28.93, delivered Ft. Worth, seller's market price on date of shipment, unchanged.

Seattle: Demand and supply good; trend easy; $23.75, f.o.b. Seattle, tank truck lots, down $2.

Atlanta: Demand good; trend steady; supply limited; citrus $20, f.o.b. Florida processing plants.

Kansas City: Demand fair; trend steady; supply ample; 12¢ gal., New Orleans, unchanged.

OAT PRODUCTS

Boston: Demand fair; trend steady; supply adequate; sacked, white pulverized $53.50, reground oat feed $32, both unchanged.

Chicago: Demand fair; trend irregular; supply ample; reground oat feed $19; No. 1 fine ground feeding oatmeal $73; feeding rolled oats $74@79.

St. Louis: Demand fair; trend steady; light offerings; white pulverized $43, reground oat feed $22, both unchanged.

Cincinnati: Demand poor; trend steady; supply adequate; pulverized white oats $45@47, unchanged.

Minneapolis: Demand slow; supplies adequate; prices steady; sacked feeding rolled $83; sacked feeding oatmeal $69; sacked crimped $65; sacked pulverized $49.50; sacked oat feed $26.

PEANUT OIL MEAL

Atlanta: Demand fair; trend steady; supply limited; 45% $63, f.o.b. south Alabama producing mills, down $2.

POULTRY BY-PRODUCTS

Boston: Demand and trend steady; supply steady; $85, unchanged.

Atlanta: Demand good; trend stronger; supply short; $82, f.o.b. Alabama and Georgia production points, up $2.

(Turn to QUOTES, page 81)

Major Markets Roundup

Millfeeds Rise as Much as $6.50

In the final ingredient trading week of 1961, millfeeds once again were star performers. Prices on millfeeds advanced as much as $6.50. Flour milling representatives attributed the rise to both good demand and tight supply.

Soybean meal seemed more stable with the prices going up 50¢ to $1.

Linseed meal, however, ran up as much as $3.50 at one point, due to a tight supply. Cottonseed meal was off 50¢ to $1.50, under slow demand.

Animal fat rose ⅛ to ¼¢ lb.

East

BOSTON: Year-end activity was extremely slow in the local market. Practically all segments of the trade were holding inventories at a minimum, not an unusual custom in this area at the end of the calendar year. There were a few outstanding strong spots, primarily because of production curbs at processing centers.

Bran and middlings were the outstanding gainers, the former advancing $3 while the latter soared $4.50 in value.

BUFFALO: Millfeeds dominated the ingredient market as prices shot up as much as $5.50 under consumer demand. Several weeks ago millfeed levels were at their seasonal highs, and consumers took to the sidelines and allowed their inventories to become depleted. As supplies ran short and consumers came back into the market their concerted buying forced prices to new seasonal highs.

One spokesman said it was known that supplies would be somewhat short during the holidays, and the sharp upturn had nothing to do with supplies but was a matter of aggressive demand sending prices higher.

Bran jumped $5.50; middlings advanced $5, and red dog gained $3.50. Otherwise the ingredient market was dull.

Midwest

CINCINNATI: Year-end demand for feed ingredients was dull. Millfeeds advanced $3. Meat and bone meal and tankage were up $2.50; linseed oil meal rose $2 to $2.50, and soybean oil meal moved up 50¢ to $1. Brewers dried grains dropped $7.

CHICAGO: Cash soybean meal prices generally are a dollar per ton higher for the week; this goes for both 44 and 50% protein content as well as for unrestricted and Eastern Trunk Line billing. This was the fourth consecutive week that prices evidenced some real concrete signs of being more or less stabilized rather than showing the wild fluctuations that were maintained throughout August, September and October and into early November.

Harvesting of a soybean crop that far over-shadowed any other previously raised by more than 125 million bushels had at one time created the impression that meal might become a drug on the market . . . now there seems to be some change of opinion in this respect with more thinking that around $60 to $65 per ton might not be too far out of line.

MINNEAPOLIS-ST. PAUL: The stellar performer in the ingredient market this week was millfeeds, which posted $1 to $2 advances.

In the millfeeds, sacked bran and middlings each posted $1 advances, and red dog moved up $2. Soybean meal was 50¢ higher. Linseed meal also moved up 50¢.

Animal fat moved up another ⅛¢ to 5¾¢ lb.

ST. LOUIS: Sharply increased demand for soybean meal and millfeeds highlighted feed ingredient trading. Trading volume on other items was somewhat limited by the holidays.

Soybean meal advanced $2, reportedly due to news that stocks at the end of November showed practically no increase for the month, despite a record crush of soybeans. Brokers noted good buying interest from feed manufacturers who had been holding meal inventories to a low level. Observers were inclined to look upon stepped-up buying activity by jobbers as short covering.

Millfeeds recovered from an early tendency to easiness and closed with gains of up to $5.

South

ATLANTA: Demand for citrus pulp continues to improve each week with the market remaining firm at $30, f.o.b. Florida processing plants, with the old crop carryover fast becoming depleted.

MEMPHIS: A strong rally by millfeed featured the ingredient market here. Millfeed made fast advance. Bulk wheat bran and gray shorts each moved $6.50 higher while bulk standard midds gained $7. Sacked feed rose $3.

The cottonseed meal market was quiet.

Soybean meal was somewhat weaker in this market. Supplies for nearby shipment seemed plentiful, and the trade apparently was reluctant to book. Most buyers appeared to have sufficient tonnage to last until after the first of the year.

Southwest

KANSAS CITY: The prices of major ingredients showed very little change this week with the exception of millfeeds. The strong millfeed market which developed late last week continued into the present week with bulk middlings up $5 in the extreme. Sacked millfeeds were not as strong but were up $3.

Protein meal prices were relatively steady. Meat proteins and cottonseed meal prices were unchanged but soybean meal was about $1 higher on a very light demand.

There was a little more strength to sun cured alfalfa prices as supplies thinned out.

FT. WORTH: With buyers holding down inventories until after the first of the year, demand for ingredients was dull. About the only changes of consequence in quotations were on millfeed and dried beet pulp.

Bulk millfeeds were especially strong and $4 to $5 higher, while the sacked was only up $1@$1.50. Dried beet pulp was quoted out of storage at $4 over December quotations, but there was very little interest. Prices on cottonseed meal were about unchanged from previous week.

West

PORTLAND: Quotations for major feed ingredients were generally unchanged during sluggish holiday trading.

The various protein tests of soybean meal gained back 50¢ of the previous week's $3 a ton loss while trading in all other oilseed meals was mostly unchanged.

SEATTLE: Millfeeds are in tight supply here with the flour mills running 10 days to two weeks behind schedule. However, most feed men are covered into January if they can get shipment.

Fish meal remained unchanged.

Other ingredients were virtually unchanged, also.

QUOTES

(Continued from page 80)

RICE BY-PRODUCTS

Ft. Worth: Demand good; trend steady; extremely light offerings standard rice bran, sufficient on solvent; standard rice bran $38, sacked, f.o.b. Houston, unchanged; solvent rice bran $31.50 bulk, $35.50 sacked, f.o.b. south Texas rice mills, unchanged.

SCREENINGS

Chicago: Demand and supply fair; trend steady; ground grain $33.50, Canadian $26.50.

Cincinnati: Demand good; trend steady; supply tight; unground grain screenings $20.50@22.50, unchanged.

SOFT PHOSPHATE

(Sacked, delivered)

Atlanta: $20.25.
Buffalo: $25.50.
Chicago: $24.96.
Cincinnati: $23.64.
Des Moines: $25.42.
Kansas City: $25.07.
Memphis: $22.28.
Minneapolis: $26.12.
Philadelphia: $24.51.
St. Louis: $24.33.

SOYBEAN OIL MEAL

St. Louis: Demand good; trend firm; supply adequate; 44% $60.50, basis Decatur, $63.50 delivered St. Louis.

Boston: Demand fair; trend steady to firm; supply adequate; 44% $57.50, up $1; 50% $63, up 50¢; both f.o.b. Decatur.

Los Angeles: Demand slow; trend firmer; supply ample; $80.60@81.10, unchanged to 50¢ higher.

Buffalo: Demand and supply fair; trend steady to higher; $57.50, Decatur, up 50¢.

Portland: Demand fairly active; trend strong to higher; supply ample; 44% $80.10, 50% $86.10.

Chicago: Demand very good; trend $1 higher; supply fair; Decatur basis, 44% protein, unrestricted billing $60, E.T.L. $57.50; 50% protein, unrestricted $65, E.T.L. $62.50.

Denver: Demand good; supply ample; $70, unchanged.

Cincinnati: Demand fair; trend higher; supply adequate; $60, Decatur, up 50¢@$1.

Ft. Worth: Demand fair; trend steady; supply sufficient; 44% $67.80@69, January, about unchanged; 50% $75@77.50, January through March, about unchanged.

Atlanta: Demand good; trend steady; supply fair; 44% $69.10, delivered, unchanged.

Kansas City: Demand slow; trend steady to stronger; supply adequate; 44% solvent $57@57.50, Decatur, up $1.

Memphis: Demand poor; trend weak; supply ample; prime 44% solvent $60.50, up $1.50.

Minneapolis: Demand good; supplies adequate; 44% up 50¢ to $53.50; 50% up 50¢ to $59.50; 41% expeller up 50¢ to $59.50.

Seattle: Demand fair; trend firm; supply ample; $80.60, delivered, carlots, unchanged.

TANKAGE

Cincinnati: Demand good; trend strong; supply fair; 60% digester $92.50, Cincinnati, up $2.50.

Chicago: Demand good; trend firm; supply fair; 60% protein $92.50, sacked.

Ft. Worth: Demand good; trend higher; supply extremely scarce; 60% digester $92.50, sacked, f.o.b. Ft. Worth, unchanged.

St. Paul: Demand fair; supplies ample; price off $1 to $93@96.

Kansas City: Demand fair; trend steady; supply tight; 60% digester $92.50, unchanged.

UREA FEED COMPOUND

Woodstock, Tenn.: Minimum 42% nitrogen, 262% protein equivalent; $105 bagged, $99 bulk, delivered in all states east of and including New Mexico, Colorado, Wyoming and Montana.

LaPlatte, Neb., and South Point, Ohio: Minimum 42% nitrogen, 262% protein equivalent $96, f.o.b. bagged; $90 bulk, cars or trucks; freight equalized with nearest producing point.

Pryor, Okla.: Minimum 42% nitrogen, 262% protein equivalent, $95 bagged, $91 bulk, f.o.b. Pryor, freight equalized with nearest producing point; $100 bagged, $96 bulk, delivered in cars or trucks to New Mexico, Colorado, Wyoming and all states to the East.

VEGETABLE AND ANIMAL FAT (HYDROLYZED)

Los Angeles: Demand fair; trend steady; supply adequate; 5½¢ lb., unchanged.

Ft. Worth: Demand good; trend firm; supply limited; 5⅝¢ lb., f.o.b. north central Texas, up ¼¢.

CONTROLS

(Continued from page 4)

ernment control that has not hurt either the small farmer or the consumer and taxpayer. Read the CSS 'offerings for restricted use' prices—only foreigners, indigents and some school children get benefits."

Regional: "Government 'control' of feed grains has not answered the problem. I have natural suspicion that such efforts might be no more successful in the above (poultry) fields."

"Nationwide controls (are) too inflexible and too costly to administer."

"(I) cannot see how any of the above overcome the law of supply and demand. Programs reported on turkeys offer loop holes to beat the intent of the law, such as raising the price of poults. Also, what becomes of excess that grows faster and weighs more at market than the law predicted?"

SOUTHEAST—Local: "We need more business in good government and less government in any business."

"We favor marketing orders at farm level—square footage basis—administered by county ASCS office, patterned after cotton-peanut-tobacco programs."

"From my present knowledge of either of the above (marketing order and production controls), I cannot visualize a plan I would be favorable to; however, if the broiler industry does not control its production in the next few months, a change of thinking could come about."

"Self-help programs policed by the government are essential if we are to stabilize the economy of the poultry industry."

"It's still hard to change the facts of life."

"This country was built and made great by the free enterprise system. The further we move into govern-

Chicks Placed in Principal Broiler Areas

(000's omitted)

Week ending	Maine	Conn.	Penn.	Ind.	Ill.	Mo.	Del.	Md.
October 21	953	236	432	456	24	593	1,184	1,888
October 28	1,158	257	539	455	38	571	1,514	1,907
November 4	1,165	251	701	517	65	679	1,529	2,056
November 11	1,105	244	763	569	54	684	1,695	1,911
November 18	1,148	296	741	622	53	694	1,519	2,022
November 25	1,089	238	595	635	58	662	1,482	2,101
December 2	1,146	222	795	709	35	671	1,615	2,057
December 9	1,154	221	707	696	50	644	1,459	2,367
December 16	1,141	177	654	697	64	673	1,803	2,156
December 23	1,171	223	813	681	31	699	1,791	2,163

Week ending	Va.	W. Va.	N.C.	S.C.	Ga.	Fla.	Ala.	Miss.
October 21	711	245	2,738	293	5,274	174	3,204	1,906
October 28	666	176	2,761	373	5,433	198	3,278	2,138
November 4	716	263	2,816	316	5,512	201	3,474	2,123
November 11	776	353	2,877	349	5,551	205	3,476	2,153
November 18	724	374	3,014	315	5,629	224	3,397	2,206
November 25	791	380	3,048	342	5,890	240	3,529	2,166
December 2	856	341	3,193	364	6,020	260	3,493	2,285
December 9	879	372	3,289	343	6,165	253	3,703	2,263
December 16	956	284	3,280	338	6,274	261	3,668	2,275
December 23	942	319	3,353	353	6,201	253	3,793	2,325

Week ending	Ark.	La.	Texas	Wash.	Oregon	Calif.	Total 22 areas 1961	Total 22 areas 1960
October 21	3,441	337	1,700	261	92	943	27,085	28,165
October 28	3,312	350	1,726	225	109	948	28,132	28,639
November 4	3,107	397	1,759	235	168	945	28,986	29,157
November 11	3,327	371	1,741	236	191	989	29,620	29,970
November 18	3,462	369	1,788	294	171	1,083	30,145	30,282
November 25	3,247	357	1,811	254	147	1,032	30,094	29,932
December 2	3,739	399	1,956	206	192	1,085	31,639	30,818
December 9	3,803	395	1,905	223	135	1,136	32,162	30,971
December 16	3,702	438	1,954	247	177	1,122	32,341	31,712
December 23	3,897	431	2,125	242	201	1,127	33,134	31,856

ment regulations, the greater our costs of operation become."

State: "We can't police ourselves, apparently."

"(Controls) can give some temporary relief but only add to the long term problem. In some manner, we must continue to produce abundantly and as efficiently as it can be done."

Regional: "Since we do not have the ability to control our greedy minds, I would be in favor of controls on a grower level or allotment, such as a given per cent of capacity and a given number of broods."

"(Yes,) if written properly."

MIDWEST — Local: "Government controls will play into hands of large manufacturers and put an end to medium and small business!"

"This is presently the biggest threat that the feed industry has."

"Farmers have been bombarded with 'efficiency feeding methods' for years as the solution to all of their problems. Larger flocks, better feeding methods have been given as the answer. I feel that our large vertical integrated operations which have 'efficiently overproduced' should not have any price supports or government 'bail out' controls."

"Times change too rapidly—cumbersome government channels can't possibly keep up with what is right for the moment. Cost of any program so far mentioned by government is too great. Control doesn't look like it would be complete on this turkey program."

"We have entirely too much government participation in agriculture at the present time. It seems like every time it enters the picture things go from bad to worse."

"Direct controls favored only if it is necessary to stabilize prices at a profitable level to the producer."

"(I) cannot understand how some feed manufacturers can promote free enterprise, as they claim, and in the same breath urge immediate turkey control. Government control cannot be effective. Policing would be difficult. (It) would drive the small producer out of business."

"Too costly to maintain. Industry may be controlled by few people."

"(I) do not believe (controls) could be made workable. How would they establish a proper margin of profit with such variance in costs of production? The margin would be held at a constant low level. Proposals now would encourage integration."

State: "One has only to look at the farm program, foreign aid program or any other program to see what a mess the government can make of whatever it undertakes. A produce station at Smith Center, Kansas, has had this sign on the wall for the last 20 years: 'The cost of government is high, but we can thank God we don't get as much as we pay for.'"

"We don't want to get into any new business — complete integration will come with marketing orders and production controls."

"Let law of economics—supply and demand—operate to eliminate the poor producers."

"On past experience, government in agriculture is a mess. I am against it all the way, but expect bureaucracy to increase until enough agri-business is hurt enough to rebel."

"Stop over-financing. This will stop over-production and bring back normal prices."

"With the depressed prices on eggs, broilers and turkeys and the heavy losses taken by many feed manufacturers, there will be limited credit extended and then only to the better operators. This inability of many to obtain feed financing from feed manufacturers will have a tendency to cut production to a great extent."

"(I) believe some type of control is essential."

Regional: "Marketing orders for milk have worked very satisfactorily."

"(I) favor (controls) if a definite time element of control is specified. Supply and demand is (the) ultimate goal."

"(Controls are favored) as a last resort. It looks like we can't run our own business profitably."

"Too much (government control) already—trend will lead to controls over the entire feed business if it continues."

"Government control would only serve to choke business as it has in the grain business."

"Marketing orders and direct production controls may eventually be in order, but we do not favor them at this time."

"(Marketing orders are) a must! The agricultural scientists have developed a production capacity far beyond the ability of the human intestine to consume."

"I have yet to see one form of production that government interference has helped. It has hurt everything it has ever tried to control. The turkey industry was in a mess about seven years ago; it refused to ask for aid and has had six good years. If it takes to government controls now, it will bring on integration, and you will have another broiler fiasco."

"I do not think it is in the American tradition to destroy free enterprise, reward the promoters of unwise expansion, and put the family farm and the feed industry in a strait jacket."

"(It is) senseless to talk of working back from the consumer or jumping into the middle of the marketing chain."

"The history of government control in any and all areas of agriculture has been miserable failure. I'm a capitalist and 'free enterpriser' and I want to remain one!"

SOUTHWEST—Local: "If the government will try to run the government and leave business alone, we will all be O.K."

State: "(I favor marketing orders and controls) reluctantly because of limited financial resources."

"(Government controls) will develop a very bad black market situation whereby the smaller operators will be in a bad squeeze."

Regional: "Without any qualification whatsoever my firm is opposed completely to any form of government controls on turkeys, broilers and eggs, and we are proud to say that the industry in Arkansas has gone on record in a number of occasions that it is opposed to federal government controls and has so stated publicly to our representatives in the Congress."

"The least government is the best government."

"The feed industry should spend its effort in trying to de-control corn and soybeans so all agriculture can operate in a free market."

WEST—Local: "Far too many controls now."

"I am in favor of a percentage cut in production of turkeys and fryers. This could be handled by cutting the numbers that feed companies feed based upon production of 1960-61."

"(Controls) cannot be fairly administered and will not allow development according to economic producing and marketing needs of areas."

"We would be selling our souls for a bureaucratic dictatorship imposing unfair and unworkable climate for the vigorous and healthy poultry industry."

"I believe this should be left entirely up to the producer."

"Someone is going to have to step in with some sort of control or the big feed companies and supermarkets will have us all."

"Any comment I might make would not be printable."

State: "Undecided."

"Violently not (in favor of controls). Look what the government has done to the grain business. Need we look further?"

Regional: "There are good reasons for and against marketing orders and direct production controls, but we believe basically that in the future the producer and entire industry would be better off without them. Therefore, we are against them."

PROFITS, TONNAGE

(Continued from page 1)

A year ago an 11% increase in tonage was indicated in a similar survey. How close this estimate will turn out to be is not known, although the American Feed Manufacturers Assn. estimated an increase of 9% in the first six months of 1961.

1961 Trouble Indicated

The difficulties experienced by many feed manufacturers in keeping even or making a satisfactory profit in 1961 were reflected strongly in their comments on hopes and plans for 1962.

Mainly, they expect to show improved operations next year through less risky financing, harder selling and sensible selling, reductions in unprofitable poultry operations and in cutting production costs through mill improvements.

Some see good prospects in cattle and hog feed business, and at the same time, quite a number are hopeful that price improvements in broilers and turkeys will help their profit picture in the coming year.

Higher feed ingredient costs and higher labor costs appear to some as a deterrent to profit-making. Also, some western manufacturers say the government's drouth aid program is hurting their business considerably.

Some indicated that heavy bad debt writeoffs would hurt their profits in 1962—a hangover from unhappy experiences in 1961.

Regional Differences

Additional insight into the prospective tonnage and profit outlook is provided in a tabulation of survey results by regions on page 83. It may be noted, for example, that manufacturers in the Southeast, hard hit by the low broiler prices in 1961, are reasonably optimistic about prospects for profits—21 out of 32 expecting an improvement.

In the Midwest, where turkey prices played hob with many manufacturers' profit and loss statements, a majority of feed men also are looking for improvements in profits. Southwestern feed men, too, are looking for better times. (See table.)

Somewhat less optimism for higher returns is reflected by the respondents in the Northeast and West where proportionately more of them look for no change in profits.

Further analysis of the survey results, as would be expected, show that the greatest number of those who plan to increase tonnage also expect to improve profits. A total of 95 plan to match production boosts with better profits. However, 7 who expect more tonnage expect less profit, and a substantial number, 48, who plan to increase tonnage anticipate no change in profit levels.

Twelve who expect less tonnage also expect smaller profits, and eight are shooting for more profit on smaller tonnage.

Also, 14 who plan to hold their production steady are anticipating more profit, while 19 expect to hold even on both tonnage and profit and 9 who plan no change in production level expect a profit decline.

Tonnage Comments

In addition to the request for estimates of tonnage and profit prospects, Feedstuffs' survey also asked for comments. Here are some typical ones on the subject of tonnage from those who expect an increase:

"We set our goal at 20% increase for 1961 and will have nearly 33% increase. Next year volume goal will be secondary to profit increase." (State-sized mill in Southwest.)

"We have just completed installation of calf meal pelleting equipment. This is why we expect an increase. Other feeds probably no increase over 1961 as we have had a good year." (State-sized mill in Midwest.)

"This is just a normal increase expected to keep in line with the increasing demand for food in our growing population." (Regional mill in Midwest.)

"Have experienced 35% increase this year and expect increase to continue through '62 but not quite so rapid—a 10% increase." (Local mill, Midwest.)

"We anticipate a decrease (slight) in poultry feed tonnage, especially broilers. However, the beef cattle feeding in this area is increasing tremendously." (Local, Southeast.)

"Estimate that we shall be feeding a larger number of cattle this next season." (Local, West.)

"New sales territories opened in 1961 should contribute half of this increase." (Regional, Midwest.)

"Farmers have a good quantity of good corn and there will be a fair increase in hog feeding." (Local, Midwest.)

"We moved into a new mill a couple of months ago, that converts the majority of our inbound ingredients to bulk and we expect to switch our outbound tonnage to bulk as fast as we can." (Local, Southeast.)

"Mainly through greater sales effort." (State, Southwest.)

"Marketing orders or production controls will affect our tonnage. How much? Anyone's guess." (Local, Northeast.)

"More feeders in our area are looking to local well-equipped mills to supply their needs for the reason they can give them better service on rations and additives." (Local, Midwest.)

"Increase in hog farrowings and beef cattle on feed." (Local, Midwest.)

"Our 1961 volume reduced because of market conditions prevailing particularly in broilers." (State, Southwest.)

"My business would probably have been up nearly 50% if it had not been for the government drouth area cheap barley program." (Local, West.)

"We are growing. Our business area is rapidly coming along in feeding." (Local, Midwest.)

"Less turkey and poultry feed, more cattle and lamb finishing feeds, more range supplements, no change in swine feeds." (Local, West.)

"Cattle feed business will quite likely increase in tonnage in 1962, but this will be offset by decrease in turkey feeds and probably broiler feeds the last half of 1962 as compared with the last half of 1961. We believe the cutback in breeder replacement stock for broilers will be a determining factor in the number of baby chicks placed in the latter half of 1962." (Regional, Southwest.)

"Greater due to new mill construction plus expanded sales effort." (Regional, Southeast.)

Expect Tonnage Drop

Here are comments of some of those who expect a decline in tonnage:

"Formula feeds will be down on account of the broiler business in bad shape." (Local, West.)

"This will be due partially to the less favorable ratio between feeders and fat cattle. Most of our finishing feeders are being more cautious this year and are not buying as many of the medium weight feeders at the present prices. The large egg producers will have about the same size flocks but the small operator will decrease." (Local, Midwest.)

"Reason—decrease in turkey crop for 1962." (State, Midwest.)

"Reduced contract numbers." (Regional, Northeast.)

"Less broiler feed." (Local Southeast.)

"We will not feed as many turkeys or chicken broilers in 1962." (Local, Southwest.)

"Decrease in turkey numbers by about 10-20%." (Local, Northeast.)

"Our local broiler shed is overproduced. I feel individual action of sensible cutbacks is the only thing that will or can defeat government

interference in our industry." (Local, West.)

"Because of drouth programs in our area." (State, West.)

"Mainly because of reduction in turkey feed financing." (Regional, Midwest.)

No Tonnage Change

Here are observations of some who expect no change in tonnage:

"Turkey tonnage down but layer and dairy tonnage up." (Local, West.)

"Less broiler feeds in 1962 expected but more hog feeds in view." (State, Southeast.)

"The slight increase in swine and cattle feeds will be more than offset by a decrease in poultry and turkey feeds. However, an increase in the use of complete feeds will offset some of the drop that would be there otherwise." (Regional, Midwest.)

"We, like most other feed manufacturing plants, are becoming more and more basic concentrate manufacturers and less and less complete feed manufacturers. This will have a tendency to hold or maintain our tonnage although it will represent, in the final end, a greater amount of commercial feed use." (State, Midwest.)

Profit Outlook Comments

Here are comments of feed men who anticipate improved profits in 1962:

"There was a loss in 1961 and we hope to have at least some profit in 1962." (Local, Southeast.)

"Marginal operators are being forced out of business." (Local, West.)

"We expect improvements in our mill operation to show a little better profit picture." (Regional, Northeast.)

"Broiler prices should be higher." (State, Northeast.)

"Look for improvement in turkey and broiler industries to offset trouble in eggs." (Multi-regional.)

"Broilers reduced." (State, Southeast.)

"We are doing a more sensible job of merchandising." (Regional, Southwest.)

"Modernization of feed mill this past year will cause greater labor efficiency." (Regional, Midwest.)

"The greater emphasis on diversified lines of merchandising and services." (Regional, Northeast.)

"Influenced by price of broilers. If it's any worse don't think we will be here (exaggerated statement)." (Regional, Southwest.)

"Installing some automation on mixing. Increased tonnage should reduce labor cost, our nemesis." (Local, Midwest.)

"Less broiler losses." (Local, Southeast.)

"We have a favorable trend in tonnage and collections which should project into 1962." (Regional, Midwest.)

"We are aiming at a 20% increase, hope to make 30%." (State, Midwest.)

"1961 was an ideal year for both business and profits. Although 1962 might show an improvement in business volume, it is unlikely that the conditions will be as ideal for profits." (Regional, Midwest.)

"Our 'shotgun promotions' this year have been costly. We expect to concentrate on hogs and beef next year." (Local, Southeast.)

"We have a new and more efficient feed plant." (Local, Midwest.)

"We hope for a better 1962 as 1961 is the poorest year ever," (Local, Northeast.)

"We do not have to increase our overhead but very little to take care of a 10% increase in tonnage." (Local, Midwest.)

"Getting tired of working for nothing. Ribbon clerks are out of business already. Time the industry took stock and watched what they are doing." (State, Midwest.)

"We are a small independent business incorporating the feed business with the grain business. The rapid growth and participation of Commodity Credit Corp. in the grain industry along with the favoritism toward cooperatives is putting great pressures on the small independent. Storage returns will be cut considerably.

"In order to stay in business we will have to become much more efficient. Our margins on grain and feed will have to be increased. Equal taxation of cooperatives will be a must sometime in the near future."

"We hope to miss some of the pitfalls in which we participated in 1961." (State, Southwest.)

"We anticipate equal volume but better profits because of improved broiler prices." (Regional, Southwest.)

"May be wishful thinking, but we think greater emphasis on planning will produce results." (Regional, Southeast.)

"Cattle feed business is up and the pay is better than broilers." (Local, West.)

"Higher average broiler prices—up 1½ to 2¢, better turkey prices, up 2¢, tighter credit control, less risk-taking." (Regional, Northeast.)

"I hope. We lost money in 1961—all broiler tonnage." (Local, West.)

"We will move into a new efficient mill." (Local, West.)

Expect Profit Drop

Those who look for smaller profits made these comments:

"Because of turkey finance and business. A large number of small feed plants are being put up by local co-ops." (State, Midwest.)

"Manufacturing costs are higher, feed ingredient costs are higher. The farmer is in a bad position with higher feed costs and lower selling prices for his product, making a difficult spot for feed manufacturers to sell at regular markups." (Regional, Southwest.)

"Because of higher priced protein markets and probably less pelleting margin. Overhead up, mainly wages or direct labor." (State, West.)

"Increasing competition and price cutting." (Local, Midwest.)

"Very unfavorable labor contract and other increasing costs." (Local, West.)

"We now participate more in marketing the final product and there is nothing more final than the returns at this point. We do not look for much improvement, if any, at this point." (Local, Southwest.)

Expect No Change

Among the comments of feed men who expect no change in the profit picture were these:

"Feel that government programs on feed grains and soybeans will reduce profit potential." (State, Midwest.)

"Due to tough competition we will have to do more to make the same as this year." (Local, Southwest.)

"Rising costs will probably dissipate profits normally arising from additional volume. Market conditions, will, of course, exert a considerable influence on final results." (Regional, Midwest.)

"Expect a little narrower margin due to increased grain prices." (Local, Midwest.)

"Bad debt writeoff will probably offset higher earnings anticipated from tonnage increase." (Regional, Midwest.)

"Because of higher taxes and labor costs we must do a little more business to come out the same." (Local, Midwest.)

"We anticipate an increase in overall volume which will offset the decrease in margin per ton due to a change from some high margin items to lower margin lines of feed." (Regional, Midwest.)

FINANCE FACTORS

(Continued from page 1)

of paramount importance in determining the 1962 turkey crop. Also, these decisions could alter the structure of turkey production arrangements. Their effect, of course, is of great concern to the feed industry because of its substantial financing of feed and poults and its contract growing of birds.

A check around the Midwest—which includes the No. 1 turkey state, Minnesota—indicates that grower situations created by over-production in 1961 probably will reduce the financing volume carried in 1962, as compared with 1961, but also may tend to swing some feed manufacturers into contract growing. This later possibility would amount to an important change in the Midwest, because in this area most of the birds are raised by growers who obtain financing for poults and feed from feed manufacturers. Of course, feed manufacturers are not their only source of operating funds. They also borrow money from banks, production credit associations and other institutions.

Contract growing of turkeys is currently a general practice in other parts of the nation—like in California and in some southern states.

Maybe Midwest, Too?

Contract growing could become important in the Midwest, too, because it may be necessary for some feed manufacturers to take title to a grower's birds. Observers speculated that some growers who have encountered difficulty in paying off their debts may become contract growers for feed manufacturers who have in the past financed their feed and poults, and in some cases their grain. In such cases, the feed company involved probably would pay the grower a fee for his labor, his facilities and other production items.

A strong cutback in turkey production is seen, in the Midwest, at least, because many growers who can't handle an extension of credit because of a negative net worth will have to reduce the scale of their operations. This reduction, so it appears, will be great in many cases.

According to present indications, some feed companies will refinance their strong growers—that is they will pick up what they have left to pay on financing arrangements initiated in 1961 and also add on new financing for 1962 production. But refinancing in all probability will be limited, because only a few growers will have sufficient collateral to carry this sort of credit extension.

Refinancing will be advantageous to feed manufacturers in some cases where growers just can't meet the demands of indebtedness without more time.

It was indicated this week that any contract growing initiated next year in the Midwest will not offset much of the prospective reduction in financed turkey production.

While some feed manufacturers who finance turkey production are staying clear of telling growers how many birds they should grow in 1962, others have adopted a policy of not financing growers who do not cut back production by a certain percentage from 1961.

In most cases a policy of this sort is not necessary, because the reduction in the financing made available to growers automatically cuts the number of birds they can grow.

PCA Financing

Production Credit Assn. officials have indicated that the growers they financed in 1961 will cut back production in 1962 by a very large percentage. PCA, as a source of financing, is relatively small compared with the amount of credit provided by feed manufacturers. In 1959, records show, 15% of the turkeys grown in Minnesota were financed by PCA. This percentage was higher 20 years ago. An estimate placed the percentage at that time at around 25%.

In testimony at the recent turkey marketing order hearing in Chicago, an Ohio PCA official said PCA financed about 90% of his area's turkeys 15 years ago. Today, however, the proportion is down to less than 10%.

Although it looks as though PCA-financed growers will have much smaller flocks in 1962 than they had in 1961, officials said PCA will be able to continue financing most of the growers it backed in 1961.

The uncertainties of the next turkey crop year have hatcheries in a quandary, too. They're asking for poult orders now, but the response to these solicitations apparently is rather vague. Even if they have supply contracts, some don't know how many breeder hens they'll need to meet 1962's poult demand.

Because so many in the turkey industry are awaiting the outcome of a possible marketing order referendum, many production decisions will be made later this year than last. This could delay the season, which some observers say would give the industry more time to sell off its storage stocks.

Do you expect your firm's profits in 1962 to be greater, less or unchanged compared wtih 1961?

Type of Business	Northeast			Southeast			Midwest			Southwest			West		
	More	Same	Less	More	Same	Less	More	Same	Less	More	Same	Less	More	Same	Less
Local	4	9	1	9	5	3	20	11	5	1	3	1	13	14	3
State	4	4	4	8	1	0	9	8	3	5	1	1	2	2	2
Regional	8	3	1	4	2	0	16	8	3	9	3	1	2	0	0
Regional Totals	16	16	6	21	8	3	45	27	11	15	7	3	17	16	5
Multi-Regional	6	2	2												
Grand Total	120	76	30												

Do you expect your formula feed tonnage in 1962 to be greater, less or unchanged compared with 1961?

Type of Business	Northeast			Southeast			Midwest			Southwest			West		
	More	Same	Less	More	Same	Less	More	Same	Less	More	Same	Less	More	Same	Less
Local	7	6	2	11	4	2	29	3	4	1	1	1	22	6	4
State	4	4	4	7	1	1	13	5	3	7	2	0	3	2	1
Regional	6	4	2	4	1	0	21	3	3	9	4	0	2	0	0
Regional Totals	17	14	8	22	6	3	63	11	10	17	7	1	27	8	5
Multi-Regional	8	2	0												
Grand Total	154	48	27												

MIDWEST

(Continued from page 4)

ers, New York, has been selected to present the convention's keynote address. The century-long educational efforts of the nation's land-grant colleges will be cited in an address by Dr. R. E. Patterson, dean, school of agriculture, Texas A&M College.

Dr. William Jasper, assistant director of the American Farm Bureau Federation's commodity division, has selected "Operation Survival—Agriculture" as the topic of his talk. Dr. Robert Spitzer, Murphy Products Co., Burlington, Wis., will speak on "The Greatest Story Never Sold."

An inspirational message, "Your Priceless Gift," will be delivered by Med Maxwell, Allied Mills, Inc., Chicago.

Welcome by Texan

The convention program will be opened Jan. 29 by Charles Harris, Burrus Feed Mills, Ft. Worth. His welcome will be immediately followed by "Setting the Pattern," a talk by Larry Alley, vice president of Pay Way Feed Mills, Kansas City, and president of the Midwest association.

This week officials of the Midwest association said more than 300 persons had made hotel reservations for the convention. Also, they noted that others planning to attend the event should make their hotel reservations direct to the Shamrock-Hilton.

INTEGRATION

(Continued from page 7)

essing includes broilers and turkeys, but apparently quite a few businesses have egg processing operations and are not involved in meat processing.

While some are directly or indirectly involved in egg and meat processing, many contractors still do not have their own processing operations, even though they may be almost entirely integrated in other respects.

END PRODUCT MARKETING— Nearly a third of the feed manufacturers reported that they are involved directly or indirectly in end product marketing. This is a fairly substantial share and reflects the closer integration or coordination of production and marketing of end products, but the percentage is no larger than shown in the outlook survey a year ago.

The question was meant to apply primarily to marketing of processed products, ready for sale to the consumer, but presumably at least some of the "yes" answers meant the sale of the raw commodity—broilers or eggs, for example—from the production operation to the processor or marketer. In any event the answers to the question do show the extensive involvement with marketing among many firms in the industry.

Many of those involved in marketing are in it on a direct basis, but quite a number specified that their involvement is indirect. Apparently this includes assistance to producers in marketing eggs and meat animals or birds. It was noted that some checked marketing but not processing, indicating help on marketing in some instances. Also, some firms apparently have such things as egg purchasing and processing and marketing set-ups even though they are not integrated producers.

There were variations among areas, but a fair number of feed companies or cooperatives in all regions are involved in marketing the end products. Among the different commodities, eggs were mentioned by far the most frequently—another indication of how feed men feel they must be active in marketing if they are to retain or expand their egg feed business in the face of a changing and increasingly commercialized egg industry.

Not all by any means feel this way about marketing, however. One feed man answering the survey put down a "no" for each category in the integration section (contracting, hatching, processing, etc.) and then added a "no, no, no" after marketing.

There still are a good many feed men, including some in specialized or concentrated production areas, who specialize in manufacturing and distributing feed and do not plan to get into end product marketing and compete with possibly well established marketing companies or groups. On the other hand, where marketing is particularly weak, some may feel it more important to become involved either indirectly or directly, and in another part of the survey, on service, quite a number of companies checked end product marketing assistance as a major service for feed customers.

FINANCING

(Continued from page 6)

"On sounder basis and with some collateral."

"Higher limits — both time and amount; greater coverage all around."

"We are working closely with Production Credit and banks offering to our mutual customers a cash quantity discount that is proving attractive. We definitely are limiting the amount of financing that we offer."

"Tighter credit. Financing some large producers until grown out."

"More direct dealer and manufacturer credit and financing to individual big farmers."

"Locally, broiler financing by banks is gone. Corn is coming to be recognized as a cash crop by lenders and loans will be available to farmers. Beef cattle feed-out programs are on the increase and in this field a thorough study of financing and credit requirements would be timely."

MIDWEST — Regional: "More 'round-the-clock' financing of farmers instead of 'project clean-up' credit. This will, of course, be institution financing (banks, PCA). It's a must to meet the credit needs of today's farmer."

"Some restriction on certain types of credit extension with feed manufacturers generally exercising closer supervision as a result of whole or partial ownership."

"Unless government interferes through production controls, normal, sound credit management will again come into its own for the benefit of all—producers, consumers and feed manufacturers."

"We anticipate that there will be a reduction in the amount of financing by many of the mills, especially in the broiler and turkey industries. If there is not a reduction in the amount of turkey financing we will see integration in turkeys within a very few years, as the mills will have to take over the growers to try and protect the money they have advanced foolishly."

"The biggest change or trend that we can see that might be developing or continuing in the usage of crediting and financing is the extent of the increase that is taking place. Today the feed manufacturer or a local retail dealer must have tremendous finances to keep up with this competitive situation. Financing and credit seem to be more important today than the products themselves."

"Exchanging of lists on poor payers so as to close all sources of supply to these feeders."

"The feed business is gradually getting out of the banking or loan business. Less open credit and a more business-like approach will surely be the trend."

"No major change in 1962. Some cut-back in dollars used to finance turkeys. PCA may take some 'captive' customers from feed companies."

"More contract growing unless we get supply management so the farmer can stay independent."

"More emphasis on straight feed contracts."

"Only changes to date are going from bad to worse."

"Shorter, more stringent terms."

"(After the turkey debacle, are you kidding?) Seriously, less open credit and financing but more integration and contracting."

"Credit and financing still will be available but the trend will be toward elimination of the poorer risks."

"More will be needed."

"Surely the trend will be to more sound financing. How can the moneymen of the major companies condone the silly deals the sales department thinks up?"

"We do none and would not care to comment."

State: "(Credit and financing) have been used as a key to captive business—it still is, only the business gets more and more complicated by becoming more integrated."

"Just more of it."

"Possibly some tightening of credit on poultry operations."

"More financing developing in feed industry."

"The customer must finance himself."

"With most large turkey and hog and egg-laying operations beginning to mix their own feeds to reduce their costs, we will become basic concentrate manufacturers and will be financing only that portion. PCA or some other government agency will be called on to provide the additional capital needed."

"It looks as though the financing of complete operations where the producer has no investment or has taken on too large a production of broilers and turkeys will continue. We certainly hope this does not become the case with cattle and hogs."

Local: "I hope it is getting better. That's the curse of the feed business today. Get management off the sales department's back. Quit these desperate efforts to increase tonnage at the expense of poor credit."

"Less credit, but more sound financing to fewer people."

"No great change in this area. Too much financing and credit by manufacturers instead of by financial institutions who are supposed to be in that business."

"We will limit our financing more to livestock and only finance well-established and profitable poultry operations. Credit losses have gotten to be a very high cost in the majority of profit and loss statements. I feel that most mills will approach it as they would any other expense that has gotten out of line. If they don't they may not have to plan for 1963—they won't be here."

"(1) I wish I could foresee stepped up financing cooperation from our local banks for feed loans to our farmer customers. This would certainly help our operation as a small independent feed manufacturer. (2) More and more larger feeder accounts will be financed through large feed mills. Local financing will continue as is."

"Government agencies or allied agencies will get more involved, like PCA, FHA, REA, etc."

"I believe it will be necessary in our area to continue to finance the protein and supplements for many of our large feeders. They have the rough feed and grain but their cash resources are limited."

"We believe there will be a tightening of credit, and more resistance to financing."

"(1) Contract feed notes and (2) conditional sales feed notes."

"Continued extended financing by major feed companies. These practices are unfair and it is quite apparent that with lower operating margins in the future will never be repaid."

"More feeder financing. More feeders will centralize their financing with local institutions, so all of their loans will be at one place and they will be better able to arrange 'open end' financing."

"By getting all users to use contracts or notes. If they won't sign them—forget 'em."

SOUTHWEST — Regional: "Joint-venture integrated operations. Feed manufacturers expanding into food processing and distribution. It appears that many companies have yet to experience heavy losses in integrated and joint-venture deals and unwilling to learn except by experience."

"As finance losses grow larger, mills will have to pull in their credit and finance lines."

"We have not engaged in this phase of the business."

"Broiler and turkey financing will be much tighter than they have been in the past, and only those who have a substantial net worth will be extended credit for volume production of broilers and turkeys. The same probably will be true of breeder stock, and quite likely this year we will see an expansion of contract feeding of cattle."

State: "Slight increase in demand for long-term credit and financing. We are opposed to this trend and feel this should be handled by bankers. Feed millers should hold credit extension to a 30-day limit."

"Tighter credit on the border lines."

"Recognition of need for more adequate feeder financing by commercial banks."

"No change with us. We have been on a cash basis for three years—would be no other way. Our business has grown faster since we quit all the poor business practices and started sound selling — for cash and financing nothing."

"We look for some tightening of credit, but financing of various operations will continue . . . on a sound footing. We would like to see more sound financing with collateral considered and less of the guarantees. Present trends don't seem to be in this direction."

"Less financing of individual growers. More of the available funds going into company-owned operations."

"(1) More companies selling out or merging and (2) more companies seeking public funds."

Local: "We think there will be less financing and more company owned projects."

WEST—Regional: "More attention to collection and more care in extending credit."

"We intend to be more critical in extending credit to poor operators."

"We look for a continuing trend of integration wherever it is workable."

State: "From a national point of view, credit and financing could be increased. This depends on what the large feed company executives decide to do. From my point of view, we will not extend any more credit than we have in the past, but this has been very little. I think this has hurt the mixed feed business, not helped it."

"Larger and more of it."

Local: "Tightening down on extending credit beyond 30 days."

"More credit and financing will be necessary."

"More sound approach to credit by larger feed companies is evident. Less 'buying' of business must continue for establishment of sound basis."

"More conservative financing is possible. Unfavorable results will, in time, require this."

"I question that large terminal mills will continue to take the severe financial losses of last year in broilers. Probably will grow birds only where they can control processing. The processor will become financially responsible for required production."

"More and easier credit and financing."

"The banks are starting to help in the feeding program."

"More g o v e r n m e n t financing (damn it)."

"Feeders must have more equity in their feeding operations. Take feed manufacturers out of the banking business."

"We are not interested in financing growers except under the most favorable conditions. We feel we can much better place our funds to work for ourselves."

MARKETS

(Continued from page 2)

3.6 lb. of feed. The week before, the ratio was 3.7.

There is still talk in the broiler industry about the scars left by six months of low prices. One broiler contractor said, "Yes, it was bad, but we lose more money every day with poultry diseases."

Today due to competition among feed contractors at least two contractors are telling growers through advertisements that they are willing to share more of the mark-up.

Another broiler contractor has reduced his guarantee per thousand birds and is paying for feed conversion, average weight and total cost of production. The production cost factor is something new. Growers will be rewarded if they can produce good weight with a low conversion and spend little on medication and fuel.

Mountain States

Feed volume is about the same as last week but slower than for the same week a year ago. Mills continue to run at a steady pace.

Feed men are confident that the broad demand for feeds, especially cattle feeds, will continue. Prices are running steady to stronger due to higher protein ingredient prices.

Pacific Northwest

With weather conditions wet in the valleys and cold east of the Cascades, representative Oregon, Washington and Idaho feed handlers found that supplemental feeding remained at heavy levels.

Sales of turkey mashes are generally limited to breeding flocks, now that the marketing season for this poultry class has ended for all practical purposes. Movement of broiler, laying hen, dairy and livestock mixed feeds continues at seasonally high levels.

The frying chicken-feed ratio appeared to be slightly more favorable than during the past several months.

Northern California

Dairy and cattle feeds continue in good demand as pastures and grazing land grass growth is hindered by cold weather.

Formula feed manufacturers in this area report normal operations on a 40 hour week.

Broiler feed and laying mashes are mainly responsible for these operations. Mixers located at or near points where Commodity Credit Corp. grain is being sold are satisfying their needs for feed grain supplies easily.

Reflecting on the year's operations, most mills report increases in business over the previous year.

Reports of a price war in certain areas of Northern California for laying feeds appear to be more or less a situation of very keen competition.

Southern California

Egg prices increased another 2¢ here, under influence of the holiday demand. Several poultrymen have sold and moved their older birds to market which has also had its influence on the market. Producers indicate that their profits for 1961 are below 1960 but higher than for 1959.

Broilermen are happy about the 17¢ lb. prices.

The beef market is stronger with the current prices 26-26½¢ lb. Feedlots are replacing stocks for the winter months, and owners are hopeful that present margins will continue.

POULTRY, EGG FIRM OPENS

SAN ANGELO, TEXAS—The Angelo Poultry & Egg Co. has been opened here by Jesse W. Paul. Mr. Paul was with the B & B Produce Co., which closed when the Paymaster Farms liquidated its broiler holdings. Mr. Paul will do custom dressing of poultry and will handle eggs.

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Georgia Poultry Group Sets Annual Meeting

GAINESVILLE, GA.—The annual meeting of the Georgia Poultry Federation has been set for Jan. 12 at the Dixie Hunt Hotel, Gainesville, according to Max F. Ward, president.

The federation is composed of nine regional and statewide organizations, including the Cherokee Feed Dealers Assn. and the Georgia Feed Dealers Assn.

REFERENDUM

(Continued from page 1)

already put over such an agreement for juice grapes in California, where he alleges political affiliation. However, the turkey hearings are not believed to have exhibited the enthusiasm of the California political aspirant, and it now appears that while he is ready to go, he plans to wait until the Jan. 9-11 meeting of the National Turkey Federation in Dallas, Texas, where he hopes to gain some broad support for the referendum—which now seems doubtful.

Possible Outcomes

If USDA fails to call for the referendum, this would admit a lost cause and if USDA calls for a referendum and voters turn down marketing orders, where would Jim Ralph stand with Secretary Freeman and with his political ambitions in California, where informants tell this reporter he now eyes the Senate seat of Clare Engle, Democratic incumbent, in 1964?

It was learned that the final turkey orders proposed will be somewhat amended to give a concession to opponents—a rather strange conclusion.

MARKETING ORDER FILING TIME EXTENDED

WASHINGTON—Reaching out for support, the U.S. Department of Agriculture has extended the filing time for findings and arguments on the proposed turkey egg and meat bird marketing orders and agreements until midnight Jan. 6, 1962. USDA officials say this supplemental information in written form will be considered in addition to evidence adduced at public hearings.

Any person interested in intervening at this time is asked to send material to: Hearing Clerk, U.S. Department of Agriculture, Washington 5, D.C. Postmarks must not be later than midnight, Jan. 6.

It was observed here that the new filing deadline should give USDA officials time for "mature consideration" before they take their case to the National Turkey Federation in Dallas, Texas, on Jan. 9. "Fast workers, these Freemanites," a trade representative quipped.

A change now proposed would lower the level of eligibility of voting power from a minimum of 400 birds to 200 (Feedstuffs, Dec. 23, page 1), thereby expanding the total vote. Why this should be considered a concession to the opposition is obscure.

It must be expected that the persons taken into this federal government proposal would be the small producers who sense a primrose path to parity prices for their birds and that they would vote for the agreements and orders.

Variation of Wheat Law

It is another variation of the existing wheat price support law where an exemption from acreage allotments was made for wheat farmers who grew less than 15 acres of wheat. That condition was made when the original wheat legislation was passed to allay fears from the small wheat farmers, particularly in the soft red wheat states.

Today that wheat acreage allotment exemption is causing havoc to the big wheat farmers who have presumably not been doing too badly under acreage allotments and high price supports. To put over their plans now, they are trying to find a method under which they can drive out or cut back the small wheat farmers' acreage allotment exemption.

May it not be possible that the turkey industry may find itself in the same squeeze at some not too distant date if it adopts the turkey order referendum?

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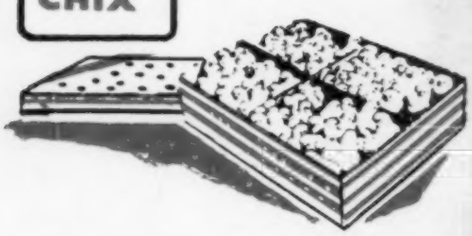

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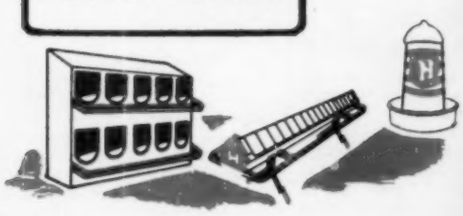

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